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**An Approach for Making JCAPS
Conformant to the C4ISR
Core Architecture Data Model (CADM)**

R. P. McDonald-Walker, Project Leader

November 2000

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R. P. McDonald-Walker, Project Leader

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PREFACE

This paper is a product of tasking¹ from the Office of the Assistant Secretary of Defense, Command, Control, Communications, and Intelligence (OASD-C3I), Architecture and Interoperability (A&I) Directorate. An early draft of this paper (December 1999) was produced with the active (monthly) participation from the Joint C4ISR Architecture Planning/Analysis System (JCAPS) Data Standardization Working Group with representatives from various Commands, Services, and Agencies.

The IDA task is directed toward providing technical analyses and recommendations for the implementation and evolution of the Core Architecture Data Model (CADM) by the Military Services and Defense Agencies, specifically in the following areas: data standardization, integration with C4ISR projects moving toward simulation-based acquisition, developing interfaces between commonly used architecture tools, implementing CADM 2.0, and developing a future version of the CADM. The specific objective addressed by this report is to determine what changes are required of JCAPS to ensure full CADM 2.0 compliance.

The study team consists of Dr. Robert P. McDonald-Walker (Project Leader), Dr. Francisco L. Loaiza, and Dr. Eugene Simaitis.

The authors wish to acknowledge the helpful comments and suggestions provided by many members of the JCAPS Data Standardization Working Group. The authors would especially like to acknowledge contributions from Mrs. Paula B. Greer (editor) and the following technical reviewers at the Institute for Defense Analyses: Dr. David L. Randall (Chair), Dr. Bertrand C. Barrois, Dr. Kevin M. Eveker, Dr. Peter S. Liou, Dr. Reginald N. Meeson, and Mr. Philip J. Walsh.

An editorial comment is in order. To aid in readability, entity names in the text of this document are consistently provided in upper-case fonts with words separated by hyphens, and attribute names are presented in initial-capital font with words separated by spaces. In addition, entity and attribute names are shown in a lower font size than is used for all other text. However, many of the tables and figures of the main body of this document, as well as in the annexes, are based on names provided in the JCAPS data model, which often uses underscores or spaces to

¹ *Development and Use of a DoD Core Architecture Data Model (CADM)*, Contact No. DASW01-98-C-0067, Task BC-1-1416, Amendment 5, 21 August 2000.

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separate words of the entity name. These tables and figures show the JCAPS entity and attribute names exactly as they are depicted in JCAPS. Thus, there are slight differences between the names of JCAPS entities and attributes when they appear in the text and when they appear in tables and figures.

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EXECUTIVE SUMMARY

A. INTRODUCTION

In June 1996, the Integration Task Force issued a final report [Ref. CISA 1996b] that included Version 1 of DoD's *Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) Architecture Framework* [Ref. CISA 1996a]. The Framework defined several key concepts—such as classifications of architectures into Operational Architecture, Technical Architecture, and Systems Architecture—intended to form the foundation for future DoD architecture development. In September 1997, the *C4ISR Core Architecture Data Model Version 1.0* was issued [Ref. CADM 1.0 1997] by the C4ISR Architecture Working Group (AWG), which captured the data requirements of Framework Version 1. In December 1997, the AWG issued Version 2 of the Framework [Ref. Framework 1997b], which was directed for use [Ref. Framework 1998] in February 1998 by USD(A&T), ASD(C3I), and the Director for C4 Systems, The Joint Staff. In December 1998, OASD(C3I) issued [Ref. CADM 2.0 1998] the *C4ISR Core Architecture Data Model Version 2.0 (CADM 2.0)*, which captured all of the nearly 1,300 data requirements expressed in Framework 2.0.

The importance of a single framework (now mandated for use) is that it provides common characteristics for architectures that create products with the same scope. Framework 2.0 defines 26 architecture products and prescribes common content and sometimes common presentation of architecture data. The role of an architecture data model is to provide the specific architecture data requirements in a form that can be directly applied to building a database for an architecture tool that generates architecture products. CADM 2.0 is a single (but complex) data model that supports *all* of the nearly 1,300 data requirements specified in the Framework. The purpose of the CADM is to provide a starting point for new architecture tools so that information can be directly exchanged between conforming databases.

A leading initiative to support architectures is being developed by the Office of the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence [OASD(C3I)] Integration and Architecture (IA) Directorate. The product is the Joint C4ISR Architecture Planning/Analysis System (JCAPS) [Refs. JCAPS 1999a; JCAPS 1999b; JCAPS 1999c]. Prototype JCAPS software and database installations have occurred throughout the various Military Commands and many Defense Agencies and Services during the last year.

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While the database of the Prototype 2.1 version of JCAPS is based, for the most part, on concepts that preceded the CADM, the intent of the JCAPS Program Manager is to migrate JCAPS to the CADM as quickly as is feasible given fiscal and implementation efficiency constraints.

A separate initiative to implement the CADM was begun in 1998 during the last 3 months of the development of CADM 2.0, resulting in the Army Systems Architecture (ASA) View of the CADM that is described in Chapter V of the CADM report (a view is a selection and arrangement of a subset of the total available entities, together with all the applicable relationships and attributes). The ASA has since grown into an integrated architecture data model known as the Army CADM. It encompasses major operational architecture databases, such as the Command, Control, Communications, and Computers (C4) Requirements Definition Program (C4RDP) that specifies the information exchange requirements (IERs) and the tables of organization and equipment (TO&Es) used to justify the acquisition of the C4 equipment described in the ASA itself. A separate implementation of the CADM has been conducted over the past year by the Department of the Navy (DON), resulting in an extension of the CADM herein called the Navy CADM (the product is the DON Integrated Architecture Database or DIAD). This report focuses on recommendations for migrating JCAPS to be CADM compliant; a description of the evolving Army integrated data model will be the subject of a separate report.

B. SUMMARY

As noted, the objective addressed by this report is to determine what changes are required of JCAPS to ensure full CADM 2.0 compliance. This tasking followed detailed analyses conducted in 1999 in conjunction with the JCAPS Data Standardization Working Group (DSWG), and this report builds on the recommendations provided by the DSWG to the JCAPS Program Manager at the end of 1999. Those recommendations were incremental in nature, suggesting small steps that would improve the correlation of the data model underlying JCAPS and the CADM. However, the main structural problems remain. This document recommends a more radical change that directly addresses these structural problems. The current JCAPS logical data model is graphically depicted in Annex A and technically described with specification tables in Annexes B (for entities), C (for relationships), and D (for attributes).

The following are the primary areas of concern with the current JCAPS data model that are addressed by the IDA recommended data model for JCAPS:

- Widespread use of 50-character identifiers in the logical data model, with the addition of a numeric version identifier and a 50-character ARCHITECTURE Identifier as primary key attributes for most entities in the physical view of that data model (but there is no primary key attribute for ARCHITECTURE in the logical data model)

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- Widespread use of 35-character fields for coded attributes, and the values of codes not documented or available
- Misunderstanding CADM entities (e.g., INFORMATION-EXCHANGE-REQUIREMENT, SYSTEM, SYSTEM-TYPE), resulting in choosing wrong attributes from the CADM
- Describing node connectivity and other node-related data without the concept of NODE
- Merging concepts of NODE and ORGANIZATION (and ORGANIZATION-TYPE) as C2-ELEMENT
- Merging concepts of NODE and MATERIEL with SYSTEM
- Merging concept of MATERIEL-ITEM with SYSTEM-TYPE
- Merging MESSAGE-STANDARD, INFORMATION-ELEMENT, and INFORMATION-REQUIREMENT with MESSAGE
- Merging TASK with PROCESS-ACTIVITY
- Storing NODE-related data only in drawings
- Using redundant relationships.

To achieve CADM conformance, IDA recommends the JCAPS database be replaced with a true extension of the CADM, using the Army CADM (together with elements of the Navy CADM) as the starting point. To accomplish this, 21 JCAPS entities containing 145 attributes (85 are owned attributes and the rest are foreign key attributes) have been added to the CADM (and the Army CADM). In addition, 92 JCAPS attributes have been added to existing entities of the CADM and Army CADM (90 are owned attributes). These additions have the potential to embed the JCAPS data model as a view of the CADM (using what has already been done in the Army and Navy extensions to the CADM) by introducing to the CADM 175 new (owned) attributes together with 21 new entities. One entity recommended by the Navy and 14 entities recommended by the Army are also included in the JCAPS View of the CADM defined in this paper. If the JCAPS Program Manager adopts the IDA recommendations, the new JCAPS will be CADM conformant, Army CADM conformant, and (with the exception of some IER attributes and physical model details) Navy CADM conformant.

A strong notion of CADM conformance, supported by both the Army and Navy implementors of the CADM, is adopted for this report. This conformance requires use of some but not all of the entities and attributes of the CADM, permits (non-redundant) extensions of the CADM, and demands that the primary key attributes specified in the CADM for identifying instances of data in the conforming database be maintained by the database management tools employed for that conforming database. These characteristics are essential to ensure that

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architecture data can be directly exchanged between conforming databases. Sharing architecture data across architectures developed in various DoD activities is essential to reducing costs, comparing and reusing architectures, and tracking common elements (e.g., military units, planned equipment and systems) among architectures.

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I. BACKGROUND

A. REQUIREMENT FOR DATA MODELS

The driving force for developing data models is a modified DoD policy that mandates their use. Discussion of this mandate is followed by a summary of the role of a data model and an identification of characteristics desired in a data model. This section concludes with a brief summary of the content and structure of a data model.

1. DoD Mandate for Interoperability and Data Standardization

Since 1988, DoD has extended its policy on interoperability of information systems to direct the integration and standardization of processes, data, and information systems DoD-wide. This policy is summarized in the following paragraphs.

It is DoD policy to "ensure that appropriate interoperability requirements are included in the functional requirements and system design of new AISs [automated information systems] and the modernization of existing AISs" [Ref. DoD 7920.1 1988]. DoD policy further states as its goals [Ref. DoD 4630.5 1992 (*italics added*)]:

- a. That forces for joint and combined operations must be supported through *compatible, interoperable, and integrated C3I systems* that can support operations world-wide throughout the entire spectrum of conflict.
- b. To establish a long-term objective a *DoD-wide, global C3I infrastructure* that can accommodate the widest possible range of missions and operational scenarios by allowing users to enter the infrastructure at any time, any place, in the execution of any mission.
- c. To develop, acquire, and deploy C3I systems and equipment that meet essential operational needs of US forces, that are compatible with existing and planned C3I systems and other electronic equipment, and that are *interoperable with other US and allied nations' functionally related C3I information systems* and equipment.
- d. That, for the purposes of compatibility, interoperability, and integration, *all C3I systems developed for use by US forces are considered to be for joint use.*

DoD policy also affirms that "DoD operations shall be executed through integrated and standard Department-wide processes, data definitions, and information systems in support of joint warfighting and peacetime missions" [Ref. DoD 8020.1 1992].

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Integrating and standardizing processes, data, and information systems across the DoD require data management tools and techniques to specify what data are required and to achieve a common understanding for the structure and meaning of data. Among the information engineering tools and techniques recommended as early as 1988 by the Corporate Information Management initiative have been activity modeling (to specify functional processes) and data modeling (to specify data structure and identify candidate standard DoD data elements). The methodology recommended to achieve this (and mandatory for presenting results) is Integrated Computer-Aided Manufacturing (ICAM) Definition (IDEF). Two variants are now U.S. standards: IDEF0 for activity modeling [Ref. FIPS 183 1993] and IDEF1X for data modeling [Ref. FIPS 184 1993].

2. Role of a Data Model

As noted, it is the intent in DoD to execute operations through integrated and standard DoD-wide processes, data definitions, and information systems, in support of joint warfighting and peacetime missions. Data models form the basis for identifying, structuring, naming, and controlling DoD standard data elements. Development, approval, and integration of data models is mandatory for DoD data standardization.

The overall goal of data models and associated data standardization activities is clear, concise, consistent, unambiguous, and easily accessible data DoD-wide. Use of standard data elements enhances interoperability among DoD information systems, facilitates increased data sharing, reduces data handling costs, and leads to better data accuracy, consistency, and timeliness [Ref. DoD 8320 1995 (8320.1.M.1)].

The operational benefits of data models for C4ISR are for (1) designing databases of systems and (2) achieving system interoperability and, in particular, basic interoperability—the exchange of information that preserves meaning and relationships of the information exchanged [Ref. ATCCIS WP 24 1990]. It is precisely the role of data models to specify, in a consistent way, the meaning and relationships of information subject to exchange. The following serves to amplify these operational benefits of data models, specifically for architecture databases:

- Data models are the basis for providing consistent data standards for specifying information exchanged for interoperability, in specifying both meaning and relationships.
 - Such data standards are needed regardless of the mechanisms selected for information exchange.
 - Basing implementation on a common data model greatly improves the effectiveness of information exchange, since the elements of information and the

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distinctions inherent to the data model will not be lost, and simplifies the transliterations that would otherwise be required between databases in a common functional domain.

- While exchanging architecture data using Extensive Markup Language (XML) or other tags is possible, basic interoperability requires more than tags on the data elements being exchanged. The common data model provides the basis for structuring and relating the tags created for XML documents from conforming databases.
- Data models provide specifications to support a range of options for information exchange:
 - Voice, electronic mail (e-mail), and facsimile
 - Formatted messages, to include tagged text
 - Files
 - Direct database-to-database exchange, with and without user-imposed constraints.
- Data models are the basis for providing consistent data standards for C4ISR systems and architectures that lead to improved database design, better accessibility, and the potential for lowering long-term system costs. Many of the entities and attributes of the CADM are based on DoD data standards, whose underlying data model is called the DoD Data Model (or, more recently, the DoD Data Architecture).

Logical or conceptual (requirements-oriented) data models provide clear specifications of data but do not limit the choices of representations for those data in planned implementations. While such representations need to be standardized to achieve interoperability, more than one representation (e.g., for time, location, linear measure) may be agreed and used. Data models ensure that such representations are consistent, since they refer to data specified by a common information model. Users and developers may select one or more representations for:

- Storing data physically in a system (e.g., database structure)
- Presenting data to operators (e.g., in designing a human-computer interface)
- Presenting data to communication systems (e.g., data communication protocols)
- Exchanging data internally within an automated system.

Data models do not limit the choice of language for user interfaces (e.g., French, English), programming languages (e.g., Ada, C++), or database query and interaction (e.g., SQL). Further, data models do not limit the choice of database technology or structure (e.g., object-oriented, hierarchical, relational).

Data models constitute one of the forms of information systems architecture necessary to specifying system requirements. Many architectures are needed to specify an information system from data, function, and network points of view. The architectures are shown as rectangular

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areas and points of view as columns in Figure 1, which is derived from the Zachman Framework [Ref. Zachman 1987]. Data and other architectures have various levels of detail and goals (indicated by the six rows in Figure 1).

Some of the architectures of Figure 1 are intentionally limited to specifying requirements without reference to technology, design, or implementation—these are the rectangular areas above the heavy black line. The conceptual (or logical) data model (shown by heavy shading in Figure 1) of the type defined by this report (fully attributed IDEF1X) forms the most detailed architecture for data requirements (above the heavy black line). A Functional Interoperability Architecture (FIA) is a relatively high-level architecture for a network view. IDEF0 activity modeling (or data flow structured analysis) may be used to specify architectures (requirements) for the detailed functional point of view. Object-oriented specifications are detailed requirement (and lower-level) architectures combining both data and function views.


STRUCTURED REQUIREMENTS			
	DATA	FUNCTION	NETWORK
REQUIREMENTS	Objectives/ Scope	What processes are performed?	Where are the operations conducted? (C2IEs, OPFACs)
	Model of the Business 	Data flows (input, output) [USAFAS Red Book]	Nodes and links (need lines) [FIA]
	Model of the Information System Conceptual Data Model Entities Relationships Attributes (and keys) [IDEF1X]	Activity Model Processes Input/Output Controls Mechanisms [IDEF0]	Distributed (System) Architecture
IMPLEMENTATION	Technology Model	Structure Chart & Detailed Design Specifications	System Architecture (with hardware specifications)
	Detailed Representations	Program Description (code, documentation)	Network Architecture Specifications (addresses, processes)
	Functioning System	e.g., DATA	e.g., COMMUNICATIONS

Figure 1. Zachman Framework

The Zachman Framework illustrates the scope of a conceptual or logical data model as being at the most detailed level appropriate to specifying data requirements without crossing the boundary that separates requirements specification from system design and choice of technology. In particular, the conceptual data model is meant to be independent of the technology selected to structure the database for system implementations (e.g., network, hierarchical, relational) and independent of the database management system chosen.

3. Desired Characteristics of a Data Model

This section identifies the qualities sought in developing the CADM. They include reasonable completeness, support for current data, utility for interoperability of architecture tools and other information systems, utility for database sharing, and acceptability by users and data administrators.

The data model seeks to provide a comprehensive specification of architecture or other data whose elements, where possible, are named and structured to be applicable to more than one functional area. Ideally, this will facilitate its integration with other data models and the DoD Data Architecture. An early test for completeness is to determine how well the data model supports all the currently defined data requirements, *As a minimum, an initial data model should be expected to support 80-90 percent of these requirements.* The defined data requirements for CADM 2.0 were the data specifications implicit in the main body of the *C4ISR Architecture Framework Version 2.0* [Ref. Framework 1997b] and explicitly in Appendix A of Framework 2.0. CADM 2.0 was shown to support 100 percent of these nearly 1,300 data requirements. Extension of the CADM for data requirements emerging in the draft Framework 2.1 has not yet begun.

Data models should be expected to be *understandable and useful to the many people who are participating in multi-Service and multinational efforts to obtain and implement agreements on data standards.* Data models can serve as a basis for integrating message and other standards from multiple functional areas. An integrated data model can provide the basis for database-to-database exchange between architecture tools and other information systems that implement standard data derived from the common data model as well as for defining media-independent data exchange specifications.

4. Content and Structure of a Data Model

The data modeling process begins with a set of data requirements derived from mission statements and associated documentation, functional specifications of operational and developmental systems, information exchange requirements, interoperability standards (such as message standards), and database specifications. Analysis is conducted and choices are made (some choices are arbitrary and reflect the focus of the data modeling team) to achieve agreements on a single way to specify the data requirements. The product of these efforts is a data model that expresses these requirements and agreements in an understandable, coherent, structured, and non-redundant way.

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One part of the data model is a set of diagrams with (1) boxes showing entities that identify those objects and concepts about which data are being collected; (2) names within those boxes of (a) attributes that uniquely identify entity instances, known as key attributes (above the line in that box), and (b) other attributes that are descriptive; and (3) relationships among the entities shown as connecting lines with names affixed. (See the IDEF1X diagrams provided in Annex A for JCAPS and Annex J for the recommended data model.) The rest of the data model consists of specifications (e.g., definitions, domains, and cross-references to existing data) of the entities, attributes, and relationships (see Annexes B, C, and D for JCAPS and Annexes K, L, and M for the recommended model).

A data model is a graphical and textual representation of analysis that identifies the data needed by an organization to achieve its mission, functions, goals, objectives, and strategies; and to manage and operate the organization. It identifies what data are “shareable” across functional and organizational boundaries, and it omits what is found to be redundant and unnecessary. It provides the top-down organization-wide perspective needed for planning, designing, building, and maintaining future integrated architecture tools and information systems with a single point of entry for the data. [Ref. 8320 1995 (8320.1-M-1)]

A data model specifies entities, attributes of entities, and relationships between entities. The diagrams that are part of the data model specification are sometimes called entity-attribute-relationship (EAR) diagrams. An entity represents information about physical or conceptual objects that is of interest to an enterprise (in this case command and control). An object may be a person, place, thing, event, or concept of importance that is singular, exclusive, and identifiable. The information being represented comprises data that are created, managed, stored, or used by the enterprise. The name of an entity is a singular noun or a noun with modifier(s). An entity corresponds to a table in a relational database. The rows of such a table are examples of entity instances.

An attribute is a property or characteristic of an entity. The name of an attribute is derived from the entity name (that appears at the beginning) and a class word (that appears at the end) that describes a category to which the attribute belongs (e.g., quantity, code, identifier, time, rate). A relationship is a meaningful association between a parent and a child entity. The labels for relationships are verbs or verb phrases. One-to-many relationships in IDEF1X are represented by lines ending in a solid dot with the solid dot at the end nearest the child entity, which is the “many” side of the relationship (many-to-many relationships would have solid dots at both ends of the line). Solid lines are used to represent *identifying* relationships, in which an instance of the parent entity is required for there to be an instance of the child entity. In contrast,

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dashed lines depict *non-identifying* relationships in which an instance of the parent is not required for an instance of the child. The open diamond at the parent end of a non-identifying relationship means that the relationship is optional—nulls are allowed for attributes of the parent that appear in the child.

Entities provide the structure for data represented in the data model. The selection of entities is somewhat arbitrary—this means that two groups of data modelers focused on the same set of data requirements could produce two entirely different data models for the same data. The differences between such data models are the user view as to what is important and as to how generally the data are to be represented.

The CADM and the recommended data model for JCAPS are attributed data models in third normal form. This means, among other things, that all the many-to-many relationships have been resolved into one or more one-to-many relationships, that some attributes of each entity are identified as “keys” used to uniquely specify each instance of an entity, and that all the non-key (descriptive) attributes depend on the key(s), only on the key(s), and nothing but the key(s). In addition, it means that the “business” rules represented by the model relationships have been reviewed for need and sufficiency—this means that the lack of a relationship may be interpreted to mean that such a relationship is not required.

B. ORGANIZATION OF THE REPORT

Chapter II describes the database structure of JCAPS Prototype 2.1 and identifies a number of areas in which the current implementation makes transition to the CADM difficult. Chapter III provides the detailed description of the proposed JCAPS View of the CADM. While not part of the IDA recommendations, Chapter IV identifies areas not within the scope of the current task that relate to the CADM and warrant future attention.

Four annexes provide the detailed specifications of JCAPS 2.1: Annex A has an entity index, a logical view of JCAPS 2.1, and a physical view of JCAPS 2.1. Annex B has the entity specifications, Annex C has the relationship specifications, and Annex D has the attribute specifications.

Two annexes record the analysis conducted for mapping every data requirement of JCAPS 2.1 to the specific ways in which those requirements are supported in the recommended data model for JCAPS described in Chapter III. Annex E provides the mapping at the entity level, and Annex F provides the mapping at the attribute level.

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Three annexes describe the products of collaborative work in 1999 with the JCAPS Program Manager, implementation team, and user community, which provide the background and rationale for many of the recommendations adopted in this report. Annex G summarizes the work of the JCAPS Data Standardization Working Group (DSWG) and the recommendations developed by IDA for and with that group. Annex H describes IDA's analysis of data requirements for IERs and provides recommendations that go beyond CADM 2.0 for structuring these requirements for JCAPS and other architecture tools and systems. Annex I presents some early analysis regarding data requirements related to information exchange requirements for information assurance.

In the same format as provided for JCAPS 2.1 in Annexes A through D, four additional annexes specify all the characteristics of the proposed data model for JCAPS. These include the entity index, logical data model view, and physical data model view of the proposed data model (Annex J); entity specifications with proposed entity "access" names (Annex K); relationship specifications with proposed cardinality and relationship type (Annex L); and the attribute definitions, "access" names, datatypes, domains with a complete set of coded values where applicable, null options, and role names of foreign key attributes where applicable (Annex M).

The report concludes with the reference list (Annex N) and a glossary (Annex O).

II. ASSESSMENT OF JCAPS PROTOTYPE 2.1

A. SUMMARY OF AREAS OF CONCERN

The following are the primary areas of concern with the current JCAPS data model that are addressed by the IDA-recommended data model for JCAPS:

- *Widespread use of 50-character identifiers* in the logical data model, with the addition of a numeric version identifier and a 50-character ARCHITECTURE Identifier as primary key attributes for most entities in the physical view of that data model (but there is no primary key attribute for ARCHITECTURE in the logical data model). The datatypes for these attributes are a significant impediment to efficient database table joins for user queries and other database management operations. Since these primary key attributes are JCAPS unique, other architecture tools will find it difficult to import JCAPS data in a way that avoids duplication of instances already in the target database. More significantly, the widespread use of ARCHITECTURE Identifier (literally, "AR_ID") in the primary keys of JCAPS entities means that every instance of those entities belongs to one and only one architecture. This results in duplicate instances of almost all the JCAPS tables having to be created for every architecture.
- *Widespread use of 35-character fields for coded attributes*, and the values of codes not documented or available. There appears to be very little rationale for enforcing a single string length on the codes for all "look-up table" (coded) attributes. The datatype and length of the string used in JCAPS for these codes is inherently inefficient and unlikely to be compatible with databases underlying other architecture tools. No documentation has yet been made available to JCAPS users for the "codes" that actually appear in the JCAPS database.
- *Misunderstanding CADM entities (e.g., INFORMATION-EXCHANGE-REQUIREMENT, SYSTEM, SYSTEM-TYPE), resulting in choosing wrong attributes from the CADM.*
 - The entity and attributes chosen by the JCAPS implementor to represent the combination of a need line and information content for an information exchange requirement (IER) is incorrect—what was chosen was the entity (of the same name) that represents only information content. Thus, the JCAPS entity INFORMATION-EXCHANGE-REQUIREMENT does not have the attributes required to support Network Simulation Warfare (NETWARS) and other Joint initiatives to capture IERs.
 - All the CADM attributes of SYSTEM and SYSTEM-TYPE were incorporated into JCAPS, but these entities were implemented as replacements for the CADM

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entities NODE-SYSTEM (a specific system at a specific node) and SYSTEM, respectively. In JCAPS, duplicate instances of SYSTEM are created every time a system appears in any diagram in any architecture product. This redundancy is primarily a result of the fact that JCAPS did not implement the CADM concept of NODE.

- *Describing node connectivity and other node-related data without the concept of NODE.* Two major JCAPS entities—SYSTEM and COMMAND-CONTROL(C2)-ELEMENT—have the characteristic that duplicate instances of C2-ELEMENT are created every time it appears in any diagram in any architecture product. This leads to thousands of redundant records and extreme difficulty in reusing any one of those records (since the duplicates are hard to differentiate).
- *Merging concepts of NODE and ORGANIZATION (and ORGANIZATION-TYPE) as C2-ELEMENT.* Based on analysis of its use, C2-ELEMENT in JCAPS is whatever organization entity participates in an IER. This means that C2-ELEMENT must include instances of ORGANIZATION-TYPE as well as instances of ORGANIZATION, the latter separately defined in the CADM and both DoD data standards. Since ORGANIZATION-TYPE does not appear in JCAPS, users are therefore required to populate C2-ELEMENT with thousands of instances of ORGANIZATION-TYPE, in addition to the tens of thousands of ORGANIZATIONs provided in the Prototype 2.1 installation database. In addition, C2-ELEMENT plays the role of “node” in the JCAPS specification of interfaces, communication links, and communication channels. Thus, C2-ELEMENT merges all three CADM concepts (NODE, ORGANIZATION, and ORGANIZATION-TYPE) into a single entity. Disaggregating these instances for use in non-JCAPS architecture databases would be a monumental task.
- *Merging concepts of NODE and MATERIEL with SYSTEM.* JCAPS has no specification of MATERIEL (a DoD data standard), and JCAPS users are forced to specify instances of MATERIEL among the instances of SYSTEM. (JCAPS does provide a separate specification of SOFTWARE-ITEM and relates that entity to SYSTEM.) As noted, the JCAPS entity SYSTEM is used as a surrogate for the CADM entity NODE-SYSTEM. This is achieved by embedding in each instance of SYSTEM an identifier (literally, “C2E_ID”) for a specific C2-ELEMENT.
- *Merging concept of MATERIEL-ITEM with SYSTEM-TYPE.* JCAPS has no specification of MATERIEL-ITEM (a DoD data standard CADM entity), and JCAPS users are forced to specify them among the instances of SYSTEM-TYPE. Disaggregating instances of SYSTEM and MATERIEL-ITEM in JCAPS would be difficult based on the attributes available.
- *Merging MESSAGE-STANDARD, INFORMATION-ELEMENT, and INFORMATION-REQUIREMENT with MESSAGE.* The CADM specifies three separate entities for (1) the standard of a specific message format (MESSAGE-STANDARD); (2) the characterization of a specific element (or group of elements) of information [INFORMATION-ELEMENT, known in the DoD Data Model (now DoD Data

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Architecture) as "ICOM"]; and (3) the requirement to make available a set of information (INFORMATION-REQUIREMENT, known in CADM 2.0 as INFORMATION-EXCHANGE-REQUIREMENT but changed in the Army CADM to INFORMATION-REQUIREMENT, in part because of the confusion over names that occurred in JCAPS). Merging these concepts and storing all their instances under the single entity MESSAGE makes it difficult for JCAPS to exchange related data with other architecture data models (e.g., implementations of the Army CADM and Navy CADM).

- *Merging TASK with PROCESS-ACTIVITY.* In the CADM, all instances of universal joint tasks and mission essential tasks were to be stored in TASK, whereas PROCESS-ACTIVITY was used (as in the DoD Data Architecture) to capture activities specified in activity models. For some architecture users, there may be no distinction between the pre-planned TASKs (e.g., movement planning) carried out in support of joint and combined operations and those that model staff functions (PROCESS-ACTIVITYs) as they carry out such tasks, but the distinction inherent to DoD standards is made in some architectures (e.g., Army Systems Architecture).
- *Storing NODE-related data only in drawings.* A large number of entities are provided in the CADM to specify what a node represents. The zero-dimensional points in JCAPS drawings are chosen with such representations depicted in those drawings, but the data about what is represented is currently embedded in implementation-specific JCAPS entities. While implementation-specific entities for drawing tools will appear in any architecture tool, this problem could be reduced in scope if NODEs were explicit and if the object associated to the NODE were identified in entities related to NODE, as in the CADM.
- *Using redundant relationships.* A brief review of Annex A will make obvious the fact that the current JCAPS data model has dozens of redundant relationships. These are not only confusing but can give rise to unexpected results to implementors attempting to use the JCAPS data model to define import and export schemes from non-JCAPS architecture databases.

B. ENTITY ASSESSMENT

The April 2000 JCAPS Prototype Version 2.1 [Ref. JCAPS 2000a] has 78 entities. These are listed in Table 1 (the 18 from the CADM are in bold font). However, 19 of the 78 entities (24 percent) have not been implemented in the sense that the user is not currently able to display, query, enter, or change any values of any instances of these tables. An additional 21 of the 78 entities (27 percent) are unique to the JCAPS implementation in the sense they do not store any retrievable or reusable architecture data (most are used to save the drawings that comprise the architecture products). Thus, user data are stored in only 38 of the 78 tables of JCAPS 2.1. Table 1 provides an initial assessment as to how all the 78 entities are related to CADM 2.0, the

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Army and Navy CADMs, and the DoD Data Architecture (which comprise the DoD data standards). An initial assessment as to whether the JCAPS 2.1 entity should be considered a candidate for future DoD-wide standardization is also given in Table 1.

Table 1. Assessment of Entities in JCAPS 2.1

JCAPS Entity Name	CADM 2.0	Army CADM	Navy CADM	DoD Std	Future Std	Comment
ARCHITECTURE	Yes	Yes	Yes	No	Yes	
ARCHITECTURE DOCUMENT	Yes	Yes	No	No	Yes	
ARM CODE	No	No	No	No	No	Should be attribute of ORG-TYPE
ASSET OWNERSHIP	No	No	No	No	No	
CIRCUIT-IER ASSOCIATION	No	No	No	No	TBD	Not available to user
COMMAND-CONTROL-ELEMENT	No	No	No	No	TBD	Should be NODE and separated from the concept of OPFAC
COMMAND-CONTROL-ELEMENT-ORGANIZATION	No	No	No	No	No	Should be NODE-ORGANIZATION
COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY	No	No	No	No	No	
COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE	No	No	No	No	No	
COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE	No	No	No	No	No	
COMMUNICATION LINK TYPE	No	No	No	No	TBD	
COMMUNICATION-CHANNEL	No	No	No	No	TBD	
COMMUNICATION-CIRCUIT	No	No	No	No	TBD	
COMMUNICATION-CIRCUIT-TYPE	No	No	No	No	TBD	
COMMUNICATION-LINK	No	No	No	No	TBD	
COMMUNICATION-MEDIUM	Yes	Yes	No	No	Yes	Not available to user
COST MANAGEMENT	No	No	No	No	No	
COUNTRY	No	No	No	Yes	Yes	
DATABASE VERSION	—	—	—	—	—	Unique to implementation
DATA-ITEM	Yes	Yes	No	No	Yes	Not available to user
DATA-ITEM-TYPE	Yes	Yes	No	No	Yes	Not available to user
DOCUMENT	Yes	Yes	No	Yes	Yes	
DOCUMENT MODEL OBJECT ASSOCIATION	—	—	—	—	—	Unique to implementation
DOCUMENT-IER ASSOCIATION	No	No	No	No	No	Not available to user
DRAW POINTS	—	—	—	—	—	Unique to implementation
DRAWGRPMEMBERS	—	—	—	—	—	Unique to implementation
DRAW-MODEL OBJECT ASSOCIATION	—	—	—	—	—	Unique to implementation
DRAWOBJECT	—	—	—	—	—	Unique to implementation
DRAWTEXT	—	—	—	—	—	Unique to implementation
ECHOLON	No	No	No	No	No	Should be attribute of ORG-TYPE
EXCHANGE-NEED-LINE-REQUIREMENT	Yes	Yes	Yes	No	Yes	Not available to user
FUNCTION	No	No	No	No	No	Not available to user
FUNCTIONAL-AREA	Yes	No	No	Yes	Yes	Not available to user
INFORMATION-EXCHANGE-REQUIREMENT	Yes	Yes	Yes	No	Yes	
INTERFACE	No	No	No	No	No	
INTERFACE TYPE	No	No	No	No	No	
INTERFACE-IER ASSOCIATION	No	No	No	No	No	Not available to user
LINK-IER ASSOCIATION	No	No	No	No	No	Not available to user
MESSAGE	No	No	No	No	No	
MISSION-AREA	Yes	Yes	Yes	Yes	Yes	Not available to user
MISSION-AREA-FUNCTIONAL-AREA	Yes	No	No	No	Yes	Not available to user
ORGANIZATION	Yes	Yes	No	Yes	Yes	
PROCESS-ACTIVITY	Yes	Yes	Yes	Yes	Yes	
QUERIES	—	—	—	—	—	Unique to implementation
QUERY ENTRIES	—	—	—	—	—	Unique to implementation

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Table 1. (Cont'd)

JCAPS Entity Name	CADM 2.0	Army CADM	Navy CADM	DoD Std	Future Std	Comment
RELATIONSHIP_ASN	No	No	No	No	No	Not available to user
REPORT_FIELDS	—	—	—	—	—	Unique to implementation
REPORTS	—	—	—	—	—	Unique to implementation
SERVICE CODE	No	No	No	No	No	Should be attribute of ORG-TYPE
SHADE_TEMP	—	—	—	—	—	Unique to implementation
SOFTWARE ITEM VERSION	No	No	No	No	No	
SOFTWARE-ITEM	Yes	Yes	No	No	Yes	
SYSTEM	Yes	Yes	Yes	No	Yes	
SYSTEM CATEGORY	No	No	No	No	No	
SYSTEM IEM	No	No	No	No	No	Not available to user
SYSTEM SOFTWARE ITEM VERSION	No	No	No	No	No	
SYSTEM TRANSMISSION INFO	No	No	No	No	No	
SYSTEM TYPE ASSOCIATION	No	No	No	No	TBD	Not available to user
SYSTEM TYPE TRANSMISSION INFO	No	No	No	No	No	Not available to user
SYSTEM TYPE-INTERFACE TYPE	No	No	No	No	TBD	Not available to user
SYSTEM TYPE-SOFTWARE ITEM VERSION	No	No	No	No	No	Not available to user
SYSTEM-ASSOCIATION	Yes	Yes	Yes	No	Yes	
SYSTEM-TYPE	Yes	No	No	No	Yes	
TASK-MISSION-AREA	Yes	No	No	No	Yes	Not available to user
TEMP_TABLE	—	—	No	—	—	Unique to implementation
UNIVERSAL-JOINT-TASK-LIST-TASK	No	No	No	No	No	
USER CODE	No	No	No	No	No	
USER_DEF_PROP_DICT	No	No	No	No	No	
USER_DEF_PROP_DICT_ENUMS	No	No	No	No	No	
USER_DEF_PROPS	No	No	No	No	No	
USER-PREFERENCE-ARCHITECTURE-SHARE-PERMISSION	—	—	—	—	—	Unique to implementation
USER-PREFERENCE-DOCUMENT-SHARE-PERMISSION	—	—	—	—	—	Unique to implementation
VISUAL-REPRESENTATION-SYMBOL	—	—	—	—	—	Unique to implementation
WORKSPACE	—	—	—	—	—	Unique to implementation
WORKSPACE-ARCHITECTURE	—	—	—	—	—	Unique to implementation
WORKSPACE-DOCUMENT	—	—	—	—	—	Unique to implementation
WORLD_Q	—	—	—	—	—	Unique to implementation
Y2K COMPLIANCE LEVEL CODE	No	No	No	No	TBD	Not available to user

Note 1: The following 11 entities were included in JCAPS 2.0 but were removed in JCAPS 2.1: ANTENNA TYPE, GENERIC ATTRIBUTE, INFORMATION-EXCHANGE-FREQUENCY, INFORMATION-EXCHANGE-THROUGHPUT, INFORMATION-EXCHANGE-TIMELINESS, MESSAGE TYPE, MESSAGE-DETAIL, NODE, NODE-COMMAND-CONTROL-ELEMENT, SECURITY-CLASSIFICATION, and TASK.

Note 2: The following eight entities were included in JCAPS 2.0 and in the logical view only of JCAPS 2.1; they are therefore considered as removed in the implementation of JCAPS 2.1: AUDIT LOG, JSERVER LIST, JSVR_PRDCTS, MSG_DTL_ASN, PRODUCT_PROFILE, SHARE GROUP, SHARE LIST, and USER_PROFILE.

Note 3: The following eight entities were added to JCAPS 2.1 (not found in JCAPS 2.0): REPORT_FIELDS, REPORTS, SHADE_TEMP, TEMP_TABLE, USER_DEF_PROP_DICT, USER_DEF_PROP_DICT_ENUMS, USER_DEF_PROPS, and WORLD_Q.

Figure 2 is an entity-relationship IDEF1X diagram of the JCAPS 2.1 data model. Depicted are 57 of the 78 entities. Excluded are the 21 implementation-specific entities (discussed below). Figure 2 shows only the entity names and the types of relationships that exist (a four-page diagram showing all the attributes in JCAPS 2.1 is provided in Annex A). As noted in Section I.A.4, the solid dot at the end of the relationship is the many or child side of a one-to-many relationship. The entity on the solid dot end is called the child entity, while the entity at the other end of the relationship is called the parent entity. Solid lines depict identifying relationships in which the child entity depends on the parent entity for its existence. In contrast,

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dashed lines depict non-identifying relationships in which an instance of the parent is not required for an instance of the child. The open diamond at the parent end of a non-identifying relationship means that the relationship is optional—nulls are allowed for attributes of the parent that appear in the child.

Table 2 lists the 38 entities of JCAPS 2.1 that are capable of storing user data and provides the definitions given in JCAPS 2.1 data model. Those matching an entity of the CADM are highlighted in bold font (10 entities or 26 percent). Two of the 10 matching entities in JCAPS 2.1 have been implemented to mean something quite different from what is defined in Table 2. As implemented, **SYSTEM**² in JCAPS 2.1 corresponds to **NODE-SYSTEM** in the CADM, denoting a specific system at a specific place. **SYSTEM-TYPE** has been implemented in JCAPS 2.1 to depict the entity **SYSTEM** in the CADM. (The entity **SYSTEM-CATEGORY**³ in JCAPS 2.1 corresponds to **SYSTEM-TYPE** in the CADM.)

Many of the entity definitions are unsatisfactory for guiding users and implementors in characterizing the concept being captured in the JCAPS entity. Three entities have no definition at all. Detailed entity specifications as provided in JCAPS 2.1 are listed in Annex B.

Table 3 lists the 19 entities of JCAPS 2.1 that were found in a detailed comparison of the JCAPS Integrated Data Dictionary (IDD) [Ref. JCAPS 1999c] and that are not yet available for review and editing by the JCAPS user. Those from the CADM are shown in bold font. Many of these structures are important elements of a CADM-conformant database, but they do not yet appear to have been implemented in a way that affects the JCAPS user view. Parts of the JCAPS 2.1 data model may not be complete. Specifically, several entities appear in the JCAPS 2.1 data model as unconnected boxes (independent entities)—relationships of these entities to other JCAPS entities appear to be essential when and if these independent entities are implemented. For example, **CIRCUIT-IER-ASSOCIATION** is not yet related either to **CIRCUIT** or to **INFORMATION-EXCHANGE-REQUIREMENT**. Annex A provides the data model diagram for these and all other entities in JCAPS.

² Entity names in the text of this document are written in “small” capital letters with words separated by hyphens.

³ Entity names in the JCAPS 2.1 data model do not consistently have hyphens separating the words in entity names. These names are shown in the original form in figures and tables of this report but, when cited in the text, are shown with hyphens to aid in readability. For example, **SYSTEM-CATEGORY** is actually “**SYSTEM CATEGORY**” in JCAPS 2.1. Without this distinction, entities such as “**ARM CODE**”, “**USER CODE**”, “**SERVICE CODE**”, and “**Y2K COMPLIANCE LEVEL CODE**” might appear to be attributes when cited in text.

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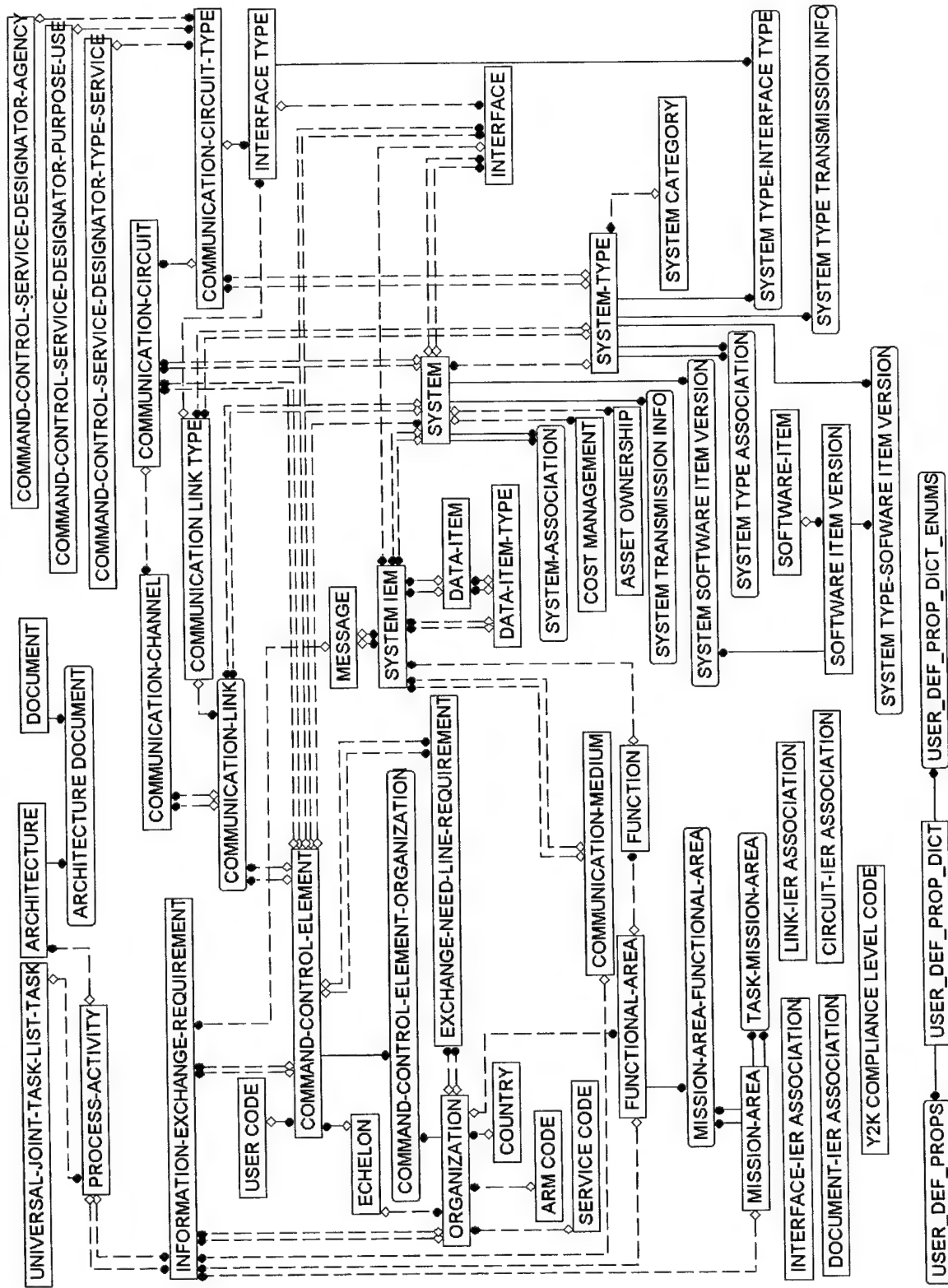


Figure 2. Entity-Relationship Diagram for JCAPS 2.1 (Excludes Implementation-Specific Entities)

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Table 2. Definitions of JCAPS 2.1 Entities that Store User Data

Entity Name	Entity Definition
ARCHITECTURE	THE STRUCTURE OF COMPONENTS, THEIR RELATIONSHIPS, AND THE PRINCIPLES AND GUIDELINES GOVERNING THEIR DESIGN AND EVOLUTION OVER TIME.
ARCHITECTURE DOCUMENT	AN ASSOCIATION OF AN ARCHITECTURE WITH A DOCUMENT.
ARM CODE	THE LIST OF AVAILABLE ARM CODES.
ASSET OWNERSHIP	THE DESCRIPTION AND PERCENTAGE OF OWNERSHIP OF A SYSTEM.
COMMAND-CONTROL-ELEMENT	INTEGRATED SYSTEMS OF DOCTRINE, PROCEDURES, ORGANIZATIONAL STRUCTURES, PERSONNEL, EQUIPMENT, FACILITIES, AND COMMUNICATIONS DESIGNED TO SUPPORT A COMMANDER'S EXERCISE OF COMMAND AND CONTROL ACROSS THE RANGE OF MILITARY OPERATIONS. (DERIVED FROM THE DOD DICTIONARY.)
COMMAND-CONTROL-ELEMENT-ORGANIZATION	AN ASSOCIATION OF A COMMAND-CONTROL-ELEMENT WITH AN ORGANIZATION.
COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY	THE AGENCY THAT SENDS OR RECEIVES ON A COMMAND AND CONTROL COMMUNICATIONS CIRCUIT.
COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE	THE PURPOSE, OR USE, OF A COMMAND AND CONTROL COMMUNICATIONS CIRCUIT.
COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE	A KIND OF SERVICE PROVIDED BY A COMMAND AND CONTROL COMMUNICATIONS CIRCUIT.
COMMUNICATION LINK TYPE	THE GENERIC TYPES OF COMMUNICATION LINKS.
COMMUNICATION-CHANNEL	A LOGICAL PARTITION OF A PHYSICAL DEVICE OVER WHICH COMMUNICATIONS ARE CONVEYED.
COMMUNICATION-CIRCUIT	A CIRCUIT USED FOR COMMUNICATIONS.
COMMUNICATION-CIRCUIT-TYPE	A KIND OF LOGICAL CIRCUIT FOR COMMUNICATIONS.
COMMUNICATION-LINK	A CONNECTION BETWEEN TWO COMMUNICATIONS NODES.
COST MANAGEMENT	THE DOLLAR AMOUNTS ASSOCIATED WITH VARIOUS ASPECTS OF THE MANAGEMENT OF A SYSTEM BY TIME PERIOD.
COUNTRY	(39) (A) A NATION OF THE WORLD.
DOCUMENT	(119/1) (A) RECORDED INFORMATION REGARDLESS OF PHYSICAL FORM.
ECHELON	A SUBDIVISION OF A HEADQUARTERS OR A SEPARATE LEVEL OF COMMAND.
INFORMATION-EXCHANGE-REQUIREMENT	A REQUIREMENT FOR THE CONTENT OF AN INFORMATION FLOW.
INTERFACE	A GENERIC CONNECTION BETWEEN C2E'S (OPFAC'S) OR SYSTEMS.
INTERFACE TYPE	THE GENERIC TYPES OF INTERFACES.
MESSAGE	A COMMUNICATION TRANSMITTED BY SPOKEN OR WRITTEN WORDS, SIGNALS, OR OTHER MEANS FROM ONE PERSON OR GROUP TO ANOTHER.
ORGANIZATION	(345)(A) AN ADMINISTRATIVE STRUCTURE WITH A MISSION.
PROCESS-ACTIVITY	(4204) (A) THE REPRESENTATION OF A MEANS BY WHICH A PROCESS ACTS ON SOME INPUT TO PRODUCE A SPECIFIC OUTPUT.
SERVICE CODE	THE LIST OF AVAILABLE SERVICE CODES.
SOFTWARE ITEM VERSION	A SPECIFIC VERSION OF SOFTWARE.
SOFTWARE-ITEM	A SET OF INSTRUCTIONS THAT GOVERNS THE OPERATION OF DATA PROCESSING EQUIPMENT.
SYSTEM	(326) (D) AN ORGANIZED ASSEMBLY OF INTERACTIVE COMPONENTS AND PROCEDURES FORMING A UNIT.
SYSTEM CATEGORY	THE LISTING AND HIERARCHY OF AVAILABLE SYSTEM CATEGORIES AND SUBCATEGORIES.
SYSTEM SOFTWARE ITEM VERSION	THE RELATIONSHIP BETWEEN SYSTEM AND SOFTWARE ITEM VERSION.
SYSTEM TRANSMISSION INFO	THE TRANSMISSION INFORMATION ASSOCIATED WITH A SPECIFIC SYSTEM.
SYSTEM-ASSOCIATION	AN ASSOCIATION OF A SYSTEM WITH ANOTHER SYSTEM. (PROPOSED REPLACEMENT FOR: SYSTEM-ASSOCIATION--(12546/1) (D) AN ASSOCIATION BETWEEN A SYSTEM AND ANOTHER SYSTEM INDICATING CONNECTIVITY BETWEEN THE SYSTEMS.)
SYSTEM-TYPE	(9083) (D) A CATEGORY OF SYSTEM.
UNIVERSAL-JOINT-TASK-LIST-TASK	A SPECIFIC TASK IN THE UNIVERSAL JOINT TASK LIST.
USER CODE	THE LIST OF AVAILABLE USER CODES.
USER_DEF_PROP_DICT	[No definition provided in JCAPS 2.1]
USER_DEF_PROP_DICT_ENUMS	[No definition provided in JCAPS 2.1]
USER_DEF_PROPS	[No definition provided in JCAPS 2.1]

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Table 3. JCAPS 2.1 Entities Not Yet Available to Users for Review and Update

Entity Name	Entity Definition	Entity Type
CIRCUIT-IER ASSOCIATION	THE RELATIONSHIP BETWEEN CIRCUIT AND INFORMATION EXCHANGE REQUIREMENT.	Independent
COMMUNICATION-MEDIUM	SPECIFICATION OF COMMUNICATIONS MEDIA USED TO CONNECT NODES.	Independent
DATA-ITEM	A MATERIEL-ITEM REPRESENTING AN INSTANCE OF INFORMATION.	Independent
DATA-ITEM-TYPE	A CLASS OF INFORMATION ABOUT A DATA-ITEM.	Independent
DOCUMENT-IER ASSOCIATION	THE RELATIONSHIP BETWEEN A DOCUMENT (AFV2 PRODUCT) AND AN IER.	Independent
EXCHANGE-NEED-LINE-REQUIREMENT	A REQUIREMENT THAT IS THE LOGICAL EXPRESSION OF THE NEED TO TRANSFER INFORMATION (WHOSE CONTENT IS SPECIFIED BY REFERENCE TO INFORMATION-EXCHANGE-REQUIREMENT) AMONG OPERATIONAL ELEMENTS (ORGANIZATIONS OR ORGANIZATION-TYPES) THAT REFERENCES RELATED TASKS, THE PROVIDING NODE/OPERATIONAL ELEMENT, AND THE RECEIVING NODE/OPERATIONAL ELEMENT.	Independent
FUNCTION	THE SPECIFICATION OF HOW INFORMATION OBJECTS ARE SYNTHESIZED TO SUPPORT THE AUTOMATION OF AN ACTIVITY OR EXCHANGE REQUIREMENT.	Independent
FUNCTIONAL-AREA	(4198) (A) A MAJOR AREA OF RELATED ACTIVITY.	Independent
INTERFACE-IER ASSOCIATION	THE RELATIONSHIP BETWEEN AN INTERFACE AND INFORMATION EXCHANGE REQUIREMENT.	Independent
LINK-IER ASSOCIATION	THE RELATIONSHIP BETWEEN LINKS AND INFORMATION EXCHANGE REQUIREMENTS.	Independent
MISSION-AREA	(2305) (A) THE GENERAL CLASS TO WHICH AN OPERATIONAL MISSION BELONGS.	Independent
MISSION-AREA-FUNCTIONAL-AREA	AN ASSOCIATION OF A MISSION-AREA WITH A FUNCTIONAL-AREA.	Dependent
SYSTEM IEM	THE RELATIONSHIP BETWEEN SYSTEM AND INFORMATION EXCHANGE MATRIX.	Independent
SYSTEM TYPE ASSOCIATION	THE RELATIONSHIPS BETWEEN TYPE OF SYSTEMS.	Dependent
SYSTEM TYPE TRANSMISSION INFO	THE TRANSMISSION INFORMATION ASSOCIATED WITH A SYSTEM TYPE.	Dependent
SYSTEM TYPE-INTERFACE TYPE	THE RELATIONSHIP BETWEEN SYSTEM TYPES AND INTERFACE TYPES.	Dependent
SYSTEM TYPE-SOFTWARE ITEM VERSION	THE RELATIONSHIP BETWEEN SYSTEM TYPE AND SOFTWARE ITEM VERSION.	Dependent
TASK-MISSION-AREA	AN ASSOCIATION OF A TASK WITH A MISSION-AREA.	Dependent
Y2K COMPLIANCE LEVEL CODE	THE CODE WHICH REPRESENT THE LEVEL OF Y2K COMPLIANCE OF A SYSTEM.	Independent

Note: The following five entities are shown in the JCAPS 2.1 data model (see Figure 1 and Annex A) as independent entities with no relationships to other entities in the data model: CIRCUIT-IER-ASSOCIATION, DOCUMENT-IER-ASSOCIATION, INTERFACE-IER-ASSOCIATION, LINK-IER-ASSOCIATION, and Y2K-COMPLIANCE- LEVEL-CODE.

Table 4 lists the 21 entities of JCAPS 2.1 that are judged to be implementation specific. None of these entities is taken from the CADM. These entities store the details of diagrams created within a local JCAPS implementation, as well as temporary data developed during JCAPS execution. While these tables can be exchanged with other JCAPS implementations with compatible versions, they are not designed to be exchanged outside the domain of JCAPS users. Ideally, all the data underlying the diagrams in JCAPS should be stored in CADM-conformant

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data structures that could be shared directly with all CADM-conformant⁴ architecture tools and databases.

Table 4. Implementation-Unique JCAPS 2.1 Entities

Entity Name	Entity Definition
DATABASE_VERSION	JCAPS INTERNAL DATABASE IDENTIFIER.
DOCUMENT MODEL OBJECT ASSOCIATION	THE RELATIONSHIP BETWEEN A DOCUMENT (AFV2 PRODUCT) AND ITS MODEL OBJECTS (AFV2 COMPONENTS).
DRAW POINTS	A JCAPS SPECIFIC DRAW OBJECT TABLE FOR REPRESENTING POINTS.
DRAWGRPMEMBERS	A DRAW-OBJECTS TABLE FOR DRAWING THE MEMBERS OF A GROUP.
DRAW-MODEL OBJECT ASSOCIATION	THE RELATIONSHIP BETWEEN A MODEL OBJECT (AFV2 COMPONENT) AND ITS JCAPS SPECIFIC GRAPHICAL REPRESENTATION INFORMATION.
DRAWOBJECT	A JCAPS SPECIFIC DRAW-OBJECTS TABLE.
DRAWTEXT	A JCAPS SPECIFIC DRAW-OBJECTS TABLE FOR REPRESENTING TEXT.
QUERIES	JCAPS SPECIFIC USER DEFINED QUERIES.
QUERY ENTRIES	JCAPS SPECIFIC USER DEFINED QUERIES.
RELATIONSHIP_ASN	A DRAW-OBJECT TABLE FOR BUILDING RELATIONSHIPS BETWEEN ORGANIZATIONS AND UNITS.
REPORT_FIELDS	[Definition not provided in JCAPS 2.1]
REPORTS	[Definition not provided in JCAPS 2.1]
SHADE_TEMP	[Definition not provided in JCAPS 2.1]
TEMP_TABLE	[Definition not provided in JCAPS 2.1]
USER-PREFERENCE-ARCHITECTURE-SHARE-PERMISSION	AN ASSOCIATION OF A USER-PREFERENCE WITH AN ARCHITECTURE.
USER-PREFERENCE-DOCUMENT-SHARE-PERMISSION	AN ASSOCIATION OF A USER-PREFERENCE WITH A DOCUMENT.
VISUAL-REPRESENTATION-SYMBOL	A SYMBOL THAT IS USED TO REPRESENT SOMETHING VISUALLY.
WORKSPACE	AN ENVIRONMENT IN WHICH WORK IS PERFORMED.
WORKSPACE-ARCHITECTURE	AN ASSOCIATION OF A WORKSPACE WITH AN ARCHITECTURE.
WORKSPACE-DOCUMENT	AN ASSOCIATION OF A WORKSPACE WITH A DOCUMENT.
WORLD_Q	[Definition not provided in JCAPS 2.1]

Implementation-specific entities are expected in any implementation of the CADM or other logical data model, and JCAPS is no exception. The 21 implementation-specific entities listed in Table 4 specify how JCAPS implementors manage access and use of the database tables as well as characterize the data underlying the choice of the specific diagramming tool chosen for JCAPS 2.1. Identical or similar entities should be expected after JCAPS migrates or converts to a CADM-conformant data model. Section IV.H (below) addresses future work that might expand the CADM to identify tool-independent data elements supporting drawings in general that might be added to a future version of the CADM.

Annex C provides a complete list of the relationships in JCAPS 2.1. It provides for each relationship the names of the parent and child entity, the verb phrase (if any) that characterizes the relationship (sometimes called the relationship name), and the cardinality of the relationship. It also provides the null option (whether the child entity can have null values for the attributes

⁴ The concept of CADM conformance is discussed in Section III.A.

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that migrate as foreign keys from the parent to the child) and the relationship type (identifying, non-identifying, or subtype).

C. ATTRIBUTE ASSESSMENT

Correspondence between JCAPS 2.1 and CADM 2.0 is much less at the detailed attribute level than might be inferred from the correspondence (26 percent) at the entity level. The actual correspondence for user-accessible attributes is, as shown below, just 12 percent.

JCAPS 2.1 has 641 attributes specified in the logical view of its physical schema. An additional 725 attributes are specified only for the tables (corresponding to logical entities) in the physical view of the schema, for a total of 1,366 attributes. Of these, 418 (31 percent) are defined and 948 (69 percent) are not defined. The 38 tables identified as user accessible have 765 attributes (502 or 66 percent undefined), the 21 implementation-unique tables have 307 attributes (207 or 67 percent undefined), and the 19 not-yet-user-accessible tables have 294 attributes (239 or 81 percent undefined).

The set of 1,366 attributes specified for JCAPS 2.1 is provided in Annex D. This list includes the following information where available in the JCAPS specification: entity/table to which it belongs; logical name (for those 641 in the logical schema); column name; domain name (e.g., string, number, datetime); datatype [e.g., VARCHAR2(35), NUMERIC(20,15), DATE]; null option (*Null* if a value for the attribute is not required, and *Not null* if a value is required); primary key indicator (*PK* if the attribute serves as part of the primary key of the entity/table to which it belongs); foreign key indicator (*FK* if the attribute is a foreign key attribute that migrates under some relationship from the primary key of the parent table of that relationship); definition; and note (usually giving the permitted values of coded domains).

As many as 227 attributes occur as foreign key attributes, implying that the attribute also appears as one of the primary key attributes of the parent entity of some relationship. When this double counting is eliminated, there are 1,139 so-called "owned" attributes (non-foreign-key attributes). Of these, 360 (32 percent) are defined and 779 (68 percent) are not defined. The owned attributes are distributed among the three groups of JCAPS entities as follows:

- User accessible entities (38): 635 owned attributes (226 defined; 409 not defined)
- Not-accessible entities (19): 230 owned attributes (45 defined; 185 not defined)
- Implementation-specific entities (21): 185 owned attributes (89 defined; 185 not defined).

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As many of the entities included in JCAPS 2.1 have not been implemented in the sense that users can review, create, or modify their contents, so also are many of the attributes of the user-accessible entities not available to users. As noted, the 38 entities of Table 2 have 635 owned attributes in JCAPS 2.1. Of these, 72 are primary key attributes that serve to identify instances of entities. Twelve (17 percent) of these 72 are also found in the CADM: ARCHITECTURE Identifier, ARCHITECTURE-DOCUMENT Identifier, COUNTRY Code, DOCUMENT Identifier, Information Exchange Requirement GUIDANCE Identifier, Message Standard AGREEMENT Identifier, ORGANIZATION Identifier, PROCESS-ACTIVITY Identifier, Software Item MATERIEL-ITEM Identifier, SYSTEM Identifier, SYSTEM-ASSOCIATION Identifier, and SYSTEM-TYPE Identifier.⁵

The remaining 563 (owned, non-key) attributes are included in JCAPS to provide *descriptive* details for instances of each entity. As many as 364 (65 percent) of these 563 descriptive attributes have no definition in JCAPS 2.1. These comprise all 313 attributes defined only for the physical view of the schema [e.g., version identifiers, together with seven management attributes for 73 of the entities (described below)]. Absent as well are definitions for all of the descriptive attributes in the following 13 entities: SOFTWARE-ITEM-VERSION, SYSTEM-CATEGORY, SYSTEM-SOFTWARE-ITEM-VERSION, SYSTEM-TRANSMISSION-INFO, USER-CODE, USER-DEF-PROP-DICT, USER-DEF-PROP-DICT-ENUMS, and USER-DEF-PROPS. Half the attributes of SYSTEM and SYSTEM-TYPE are also undefined. Lack of definitions means that matching the underlying data requirements of the attribute with the CADM relies primarily on the name of the attribute. Thus, 64 (11 percent) of the 563 owned attributes are from the CADM. In summary, among all 635 owned attributes in user-accessible entities, 76 (12 percent) are from the CADM.

As noted, 725 of the 1,366 JCAPS 2.1 attributes are specified in the physical view but not the logical view of the JCAPS physical schema data model. In the physical view, the representation of each entity is called a table, and its elements are called columns. The 725 attributes have only a "column" name (wherein underscores are used instead of blanks or hyphens) and not a logical attribute name. Each is highlighted in bold font in the complete attribute listing provided in Annex D. Table 5 identifies the 73 tables (37 seen by the user, 19 not available to users, and 17 implementation-specific) whose physical schema has all the following seven attributes for capturing management data about each row:⁶

⁵ As with entity names, attribute names are shown in the text in small font. Lower-case is used for the words other than the entity name (with initial capital letters) even though upper case is used in the JCAPS 2.1 data model.

⁶ No definition was provided for any of these attributes.

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- AK_ID—Datatype NUMBER(12); Not null (a value is required for every row)
- ARCHIVE_DATE—Datatype DATE; Null (a value is optional)
- CLS_CODE—Datatype VARCHAR2(35); Not null
- CREATE_DATE—Datatype DATE; Not null
- CURRENCY_FLAG—Datatype CHAR(1); Not null
- MOD_DATE—Datatype DATE; Not null
- SHADE_FLAG—Datatype CHAR(1); Not null.

Table 5. JCAPS 2.1 Entities with Seven Common Management Attributes

Entity Group	Entity Name
Implementation Unique	DOCUMENT MODEL OBJECT ASSOCIATION
	DRAW POINTS
	DRAWGRPMEMBERS
	DRAW-MODEL OBJECT ASSOCIATION
	DRAWOBJECT
	DRAWTEXT
	QUERIES
	QUERY ENTRIES
	RELATIONSHIP_ASN
	REPORT_FIELDS
	REPORTS
	USER-PREFERENCE-ARCHITECTURE-SHARE-PERMISSION
	USER-PREFERENCE-DOCUMENT-SHARE-PERMISSION
	VISUAL-REPRESENTATION-SYMBOL
	WORKSPACE
	WORKSPACE-ARCHITECTURE
	WORKSPACE-DOCUMENT
Not Available to Users	CIRCUIT-IER ASSOCIATION
	COMMUNICATION-MEDIUM
	DATA-ITEM
	DATA-ITEM-TYPE
	DOCUMENT-IER ASSOCIATION
	EXCHANGE-NEED-LINE-REQUIREMENT
	FUNCTION
	FUNCTIONAL-AREA
	INTERFACE-IER ASSOCIATION
	LINK-IER ASSOCIATION
	MISSION-AREA
	MISSION-AREA-FUNCTIONAL-AREA
	SYSTEM IEM
	SYSTEM TYPE ASSOCIATION
	SYSTEM TYPE TRANSMISSION INFO
	SYSTEM TYPE-INTERFACE TYPE
	SYSTEM TYPE-SOFTWARE ITEM VERSION
	TASK-MISSION-AREA
	Y2K COMPLIANCE LEVEL CODE
User	ARCHITECTURE
	ARCHITECTURE DOCUMENT
	ARM CODE
	ASSET OWNERSHIP
	COMMAND-CONTROL-ELEMENT
	COMMAND-CONTROL-ELEMENT-ORGANIZATION
	COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY
	COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE
	COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE

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Table 5. (Cont'd)

Entity Group	Entity Name
User (Cont'd)	COMMUNICATION LINK TYPE
	COMMUNICATION-CHANNEL
	COMMUNICATION-CIRCUIT
	COMMUNICATION-CIRCUIT-TYPE
	COMMUNICATION-LINK
	COST MANAGEMENT
	COUNTRY
	DOCUMENT
	ECHELON
	INFORMATION-EXCHANGE-REQUIREMENT
	INTERFACE
	INTERFACE TYPE
	MESSAGE
	ORGANIZATION
	PROCESS-ACTIVITY
	SERVICE CODE
	SOFTWARE ITEM VERSION
	SOFTWARE-ITEM
	SYSTEM
	SYSTEM CATEGORY
	SYSTEM SOFTWARE ITEM VERSION
	SYSTEM TRANSMISSION INFO
	SYSTEM-ASSOCIATION
	SYSTEM-TYPE
	UNIVERSAL-JOINT-TASK-LIST-TASK
	USER CODE
	USER_DEF_PROP_DICT
	USER_DEF_PROPS

Note: The following five entities do not have the seven attributes in their physical schema: DATABASE_VERSION, SHADE_TEMP, TEMP_TABLE, and WORLD_Q, which are implementation-unique entities; and USER_DEF_PROP_DICT_ENUMS, which is user accessible.

The 73 entities identified in Table 5 each account for 7 management attributes, for a total of 511 attributes. Of the remaining 215 of the 725 attributes specified in the physical but not logical view of the JCAPS physical schema, 102 are owned attributes and 113 are foreign key attributes (duplicating an owned primary key attribute as it migrates to another entity under some relationship). These 102 owned attributes are physical-schema-unique and non-management. They are listed by entity in Table 6 (54 attributes in entities available to the user), Table 7 (19 attributes in implementation-unique entities), and Table 8 (29 attributes in entities not available to the user).

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Table 6. JCAPS Physical-View-Unique, Non-Management, Owned Attributes in Entities Available to the User

Entity Name	Attribute Column Name	Attribute Role	Datatype	Null Option
ARCHITECTURE	AR_VID	Primary Key	NUMBER(12)	NOT NULL
ARCHITECTURE	SHARE_CAT_VID	Descriptive	NUMBER(12)	NULL
COMMAND-CONTROL-ELEMENT	ARCH_ID	Primary Key	VARCHAR2(50)	NOT NULL
COMMAND-CONTROL-ELEMENT	C2E_VID	Primary Key	NUMBER	NOT NULL
COMMAND-CONTROL-SERVICE- DESIGNATOR-AGENCY	CCSD_AGENCY_VID	Primary Key	NUMBER(12)	NOT NULL
COMMAND-CONTROL-SERVICE- DESIGNATOR-PURPOSE-USE	CCSD_PUR_USE_VID	Primary Key	NUMBER(12)	NOT NULL
COMMAND-CONTROL-SERVICE- DESIGNATOR-TYPE-SERVICE	CCSD_TYS_VID	Primary Key	NUMBER(12)	NOT NULL
COMMUNICATION LINK TYPE	COMM_LNK_TY_VID	Primary Key	NUMBER(12)	NOT NULL
COMMUNICATION-CHANNEL	COM_CH_VID	Primary Key	NUMBER(12)	NOT NULL
COMMUNICATION-CIRCUIT	COM_CRCT_VID	Primary Key	NUMBER(12)	NOT NULL
COMMUNICATION-CIRCUIT	FROM_C2E_VID	Descriptive	NUMBER(12)	NULL
COMMUNICATION-CIRCUIT-TYPE	COM_CIR_TY_VID	Primary Key	NUMBER(12)	NOT NULL
COMMUNICATION-LINK	COM_LNK_VID	Primary Key	NUMBER(12)	NOT NULL
COUNTRY	CTRY_VID	Primary Key	NUMBER(12)	NOT NULL
DOCUMENT	BFILE_VID	Descriptive	NUMBER(12)	NULL
DOCUMENT	D_MASK	Descriptive	VARCHAR2(255)	NULL
DOCUMENT	DOC_VID	Primary Key	NUMBER(12)	NOT NULL
DOCUMENT	Q_ID	Descriptive	VARCHAR2(50)	NULL
DOCUMENT	Q_VID	Descriptive	NUMBER(12)	NULL
ECHOLON	ECHOLON_VID	Primary Key	NUMBER(12)	NOT NULL
INFORMATION-EXCHANGE-REQUIREMENT	FREQ_BAND_VID	Descriptive	NUMBER(12)	NULL
INFORMATION-EXCHANGE-REQUIREMENT	ICOM_VID	Descriptive	NUMBER(12)	NULL
INFORMATION-EXCHANGE-REQUIREMENT	IER_VID	Primary Key	NUMBER(12)	NOT NULL
INFORMATION-EXCHANGE-REQUIREMENT	SCENARIO_VID	Descriptive	NUMBER(12)	NULL
INFORMATION-EXCHANGE-REQUIREMENT	SEQ_NO_VID	Descriptive	NUMBER(12)	NULL
INTERFACE	INTF_VID	Primary Key	NUMBER(12)	NOT NULL
INTERFACE TYPE	INTF_TY_VID	Primary Key	NUMBER(12)	NOT NULL
MESSAGE	ARCH_ID	Primary Key	VARCHAR2(50)	NOT NULL
MESSAGE	MESSAGE_VID	Primary Key	NUMBER(12)	NOT NULL
ORGANIZATION	ARCH_ID	Primary Key	VARCHAR2(50)	NOT NULL
ORGANIZATION	EHLN_LVL_VID	Descriptive	NUMBER(12)	NULL
ORGANIZATION	ORG_VID	Primary Key	NUMBER(12)	NOT NULL
ORGANIZATION	UIC_VID	Descriptive	NUMBER(12)	NULL
PROCESS-ACTIVITY	ACTION_VID	Descriptive	NUMBER(12)	NULL
PROCESS-ACTIVITY	ARCH_ID	Primary Key	VARCHAR2(50)	NOT NULL
PROCESS-ACTIVITY	PRCS_ACTY_VID	Primary Key	NUMBER(12)	NOT NULL
SOFTWARE ITEM VERSION	INFO_ID	Descriptive	VARCHAR2(50)	NULL
SOFTWARE ITEM VERSION	INFO_VID	Descriptive	NUMBER(12)	NULL
SOFTWARE ITEM VERSION	SW_IT_VER_VID	Primary Key	NUMBER(12)	NOT NULL
SOFTWARE ITEM VERSION	USER_ID	Descriptive	VARCHAR2(50)	NULL
SOFTWARE ITEM VERSION	USER_VID	Descriptive	NUMBER(12)	NULL
SOFTWARE-ITEM	SW_IT_VID	Primary Key	NUMBER(12)	NOT NULL
SYSTEM	SY_IMP_VID	Descriptive	NUMBER(12)	NULL
SYSTEM	SYS_VID	Primary Key	NUMBER(12)	NOT NULL
SYSTEM CATEGORY	SYS_CAT_D_TXT	Descriptive	VARCHAR2(2000)	NULL
SYSTEM SOFTWARE ITEM VERSION	INFO_ID	Descriptive	VARCHAR2(50)	NULL
SYSTEM SOFTWARE ITEM VERSION	INFO_VID	Descriptive	NUMBER(12)	NULL
SYSTEM SOFTWARE ITEM VERSION	SYS_SW_IT_VER_VID	Primary Key	NUMBER(12)	NOT NULL
SYSTEM SOFTWARE ITEM VERSION	USER_ID	Descriptive	VARCHAR2(50)	NULL
SYSTEM SOFTWARE ITEM VERSION	USER_VID	Descriptive	NUMBER(12)	NULL
SYSTEM-TYPE	SY_TY_VID	Primary Key	NUMBER(12)	NOT NULL
UNIVERSAL-JOINT-TASK-LIST-TASK	UJTL_HIER_VID	Primary Key	NUMBER(12)	NOT NULL
UNIVERSAL-JOINT-TASK-LIST-TASK	UJTL_LVL_WAR_VID	Primary Key	NUMBER(12)	NOT NULL
USER CODE	USER_CD_VID	Primary Key	NUMBER(12)	NOT NULL

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Table 7. JCAPS Physical-View-Unique, Non-Management, Owned Attributes in Implementation-Unique Entities

Entity Name	Attribute Column Name	Attribute Role	Datatype	Null Option
DOCUMENT MODEL OBJECT ASSOCIATION	D_MASK	Descriptive	VARCHAR2(255)	NULL
DRAW-MODEL OBJECT ASSOCIATION	MODEL_VID	Descriptive	NUMBER(12)	NULL
DRAWOBJECT	D_MASK	Descriptive	VARCHAR2(255)	NULL
DRAWOBJECT	U_VID	Primary Key	NUMBER(12)	NOT NULL
DRAWOBJECT	VRS_VID	Descriptive	NUMBER(12)	NULL
QUERIES	U_VID	Descriptive	NUMBER(12)	NOT NULL
QUERY ENTRIES	PARENT_VID	Descriptive	NUMBER(12)	NULL
QUERY ENTRIES	QUERY_VID	Descriptive	NUMBER(12)	NOT NULL
QUERY ENTRIES	U_VID	Descriptive	NUMBER(12)	NOT NULL
RELATIONSHIP_ASN	REL_ASN_VID	Primary Key	NUMBER(12)	NOT NULL
USER-PREFERENCE-ARCHITECTURE-SHARE-PERMISSION	A_MASK	Descriptive	VARCHAR2(255)	NULL
USER-PREFERENCE-DOCUMENT-SHARE-PERMISSION	D_MASK	Descriptive	VARCHAR2(255)	NULL
VISUAL-REPRESENTATION-SYMBOL	TEMP_PENVIR_VID	Descriptive	NUMBER(12)	NULL
VISUAL-REPRESENTATION-SYMBOL	VRS_TY_VID	Descriptive	NUMBER(12)	NULL
VISUAL-REPRESENTATION-SYMBOL	VRS_VID	Primary Key	NUMBER(12)	NOT NULL
WORKSPACE	SHARE_CAT_VID	Descriptive	NUMBER(12)	NULL
WORKSPACE	WS_VID	Primary Key	NUMBER(12)	NOT NULL
WORKSPACE-ARCHITECTURE	A_MASK	Descriptive	VARCHAR2(255)	NULL
WORKSPACE-DOCUMENT	D_MASK	Descriptive	VARCHAR2(255)	NULL

Table 8. JCAPS Physical-View-Unique, Non-Management, Owned Attributes in Entities Not Available to User

Entity Name	Attribute Column Name	Attribute Role	Datatype	Null Option
CIRCUIT-IER ASSOCIATION	ARCH_ID	Primary Key	VARCHAR2(50)	NOT NULL
CIRCUIT-IER ASSOCIATION	COM_CRCT_VID	Primary Key	NUMBER(12)	NOT NULL
CIRCUIT-IER ASSOCIATION	IER_VID	Primary Key	NUMBER(12)	NOT NULL
COMMUNICATION-MEDIUM	ARCH_ID	Primary Key	VARCHAR2(50)	NOT NULL
COMMUNICATION-MEDIUM	COM_MED_VID	Primary Key	NUMBER(12)	NOT NULL
DATA-ITEM	MI_VID	Primary Key	NUMBER(12)	NOT NULL
DATA-ITEM-TYPE	ARCH_ID	Primary Key	VARCHAR2(50)	NOT NULL
DATA-ITEM-TYPE	DT_IT_TY_VID	Primary Key	NUMBER(12)	NOT NULL
DOCUMENT-IER ASSOCIATION	DOC_VID	Primary Key	NUMBER(12)	NOT NULL
DOCUMENT-IER ASSOCIATION	IER_VID	Primary Key	NUMBER(12)	NOT NULL
EXCHANGE-NEED-LINE-REQUIREMENT	EXCN_ND_LN_REQ_VID	Primary Key	NUMBER(12)	NOT NULL
FUNCTION	ARCH_ID	Primary Key	VARCHAR2(50)	NOT NULL
FUNCTIONAL-AREA	FNCT_AREA_VID	Primary Key	NUMBER(12)	NOT NULL
INTERFACE-IER ASSOCIATION	ARCH_ID	Primary Key	VARCHAR2(50)	NOT NULL
INTERFACE-IER ASSOCIATION	IER_VID	Primary Key	NUMBER(12)	NOT NULL
INTERFACE-IER ASSOCIATION	INTF_VID	Primary Key	NUMBER(12)	NOT NULL
LINK-IER ASSOCIATION	ARCH_ID	Primary Key	VARCHAR2(50)	NOT NULL
LINK-IER ASSOCIATION	COM_LNK_VID	Primary Key	NUMBER(12)	NOT NULL
LINK-IER ASSOCIATION	IER_VID	Primary Key	NUMBER(12)	NOT NULL
MISSION-AREA	ARCH_ID	Primary Key	VARCHAR2(50)	NOT NULL
MISSION-AREA	MSN_AR_VID	Primary Key	NUMBER(12)	NOT NULL
SYSTEM IEM	INP_MED_FMT_VID	Descriptive	NUMBER(12)	NULL
SYSTEM IEM	OUT_MED_FMT_VID	Descriptive	NUMBER(12)	NULL
SYSTEM IEM	SYS_IEM_VID	Primary Key	NUMBER(12)	NOT NULL
SYSTEM TYPE-SOFTWARE ITEM VERSION	INFO_ID	Descriptive	VARCHAR2(50)	NULL
SYSTEM TYPE-SOFTWARE ITEM VERSION	INFO_VID	Descriptive	NUMBER(12)	NULL
SYSTEM TYPE-SOFTWARE ITEM VERSION	SY_TY_SW_IT_VER_VID	Primary Key	NUMBER(12)	NOT NULL
SYSTEM TYPE-SOFTWARE ITEM VERSION	USER_ID	Descriptive	VARCHAR2(50)	NULL
SYSTEM TYPE-SOFTWARE ITEM VERSION	USER_VID	Descriptive	NUMBER(12)	NULL

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One result of this analysis is the identification of the primary key attribute of the entity ARCHITECTURE. ARCHITECTURE Identifier (literally, "AR_ID") is not included in the logical view of the JCAPS data model; indeed, the logical view has no primary key attributes for the independent entity ARCHITECTURE (the portion of the box shown in the first half of Annex A with title ARCHITECTURE above the line is blank). Further, AR_ID is not included as a primary key attribute of ARCHITECTURE in Table 6 among owned attributes defined only for the physical view of the data model. In fact, AR_ID is an owned primary key attribute of *all* of the following 11 other entities: CIRCUIT-IER-ASSOCIATION, COMMAND-CONTROL-ELEMENT, COMMUNICATION-MEDIUM, DATA-ITEM-TYPE, FUNCTION, INTERFACE-IER-ASSOCIATION, LINK-IER-ASSOCIATION, MESSAGE, MISSION-AREA, ORGANIZATION, and PROCESS-ACTIVITY. Examination of the physical view of the data model in the second half of Annex A shows that AR_ID migrates to ARCHITECTURE via a nulls-allowed, non-identifying relationship "T900_FK" relationship (see Annex C) from PROCESS-ACTIVITY to ARCHITECTURE. The foreign key attribute AR_ID from that relationship is arbitrarily forced to assume the role of the primary key (and thus may never be null). When loading the ARCHITECTURE table, the user must choose a different PROCESS-ACTIVITY from that chosen for any other ARCHITECTURE, and the AR_ID defined for that PROCESS-ACTIVITY must be different from that used for any other ARCHITECTURE.

D. MODEL STRUCTURE ASSESSMENT

Lack of Definitions. As noted above, 65 percent of the 563 descriptive attributes in JCAPS 2.1 for the 38 user-accessible entities have no definition in JCAPS 2.1. When the primary key and foreign key attributes are included, 409 or 64 percent of the 635 attributes in these 38 entities have no definitions. Three entities are not defined.

Products as Drawings. JCAPS Prototype 2.1 is considered successful from the user point of view because it can create and store the essential operational architecture products and several additional architecture products identified in Framework 2.0. These products are stored as drawings, given a DOCUMENT Identifier, and related to a specific ARCHITECTURE by recording the association in ARCHITECTURE-DOCUMENT. There is, however, no way for the user to query the data underlying such a product (e.g., to list all the ORGANIZATIONs cited in the product).

50-Character Identifiers. JCAPS has instituted a unique standard for all of its primary key identifiers, adopting the rule that each should have a datatype of a 50-character string. In addition, seen only in the physical view of the JCAPS 2.1 data model, each entity has an additional Version Identifier primary key attribute that is a floating point (real number) datatype. Use of real numbers for primary key attributes presents a real challenge to database management

systems when precisely matching specific values for the key in order to select instances of an entity, since the degree of precision and round-off errors can cause unintentional results.⁷ The use of such a lengthy and imprecise key structure will make it very difficult for JCAPS to exchange data tables with other architecture tools without special software tools to transliterate keys. Further, use of these lengthy and complex keys in JCAPS is likely to be a significant factor in slow response time to queries and displays that cross tables in the database without pre-joining and pre-indexing all of them in advance. For comparison, the Army Systems Architecture implementation of the CADM chose to use a single 32-bit integer whenever possible for a primary key attribute and to make versions a descriptive (non-key) attribute.

35-Character Codes. JCAPS has also instituted a unique standard for the datatype of most of the coded attributes. While the CADM intended that an integer or a character field of no more than four characters in length be used for codes, the full JCAPS 2.1 data model has given 66 of its 89 coded attributes (74 percent) the datatype varchar(35). Table 9 lists all the "code" attributes in JCAPS 2.1. As many as 75 attributes in this table (84 percent) have field lengths varying from 20 to 250 characters, which suggests that in many cases codes are not actually being used for storage and retrieval. The widespread use of varchar(35) for the entire JCAPS 2.1 suggests that migration plans for JCAPS will continue this inefficient feature.

Long Table and Column Names. Because of the limitations of some widely used database management systems, DoD has adopted the standard that physical names for entities (known as entity access names or table names) and for attributes (known as attribute access names or column names) shall be 18 characters or less [Ref. DoD 8320 1995]. In JCAPS 2.1, only 1 of the 143 table names (0.7 percent) fails to meet this requirement, but 26 of the 1,366 column names (1.9 percent) have a length exceeding 18 characters.

⁷ An integer identifier would be preferred.

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Table 9. Code Attributes from User-Accessible Portion of JCAPS 2.1

Entity Name	Attribute Name	Attribute Definition from JCAPS 2.1	Datatype
ARCHITECTURE	AR_CLSN_CD	[Definition not provided in JCAPS 2.1]	VARCHAR2(35)
ARCHITECTURE	ARCHITECTURE VIEW TYPE CODE	THE CODE THAT DENOTES A SPECIFIC VIEW OF AN ARCHITECTURE.	VARCHAR2(35)
ARCHITECTURE	SHARE CATEGORY CODE	CODE WHICH DENOTES THE SHARE CATEGORY OF THE ARCHITECTURE	VARCHAR2(35)
ARCHITECTURE DOCUMENT	ARCHITECTURE-DOCUMENT ROLE CODE	THE CODE THAT REPRESENTS THE CLASS OF RELATIONSHIP THAT A DOCUMENT HAS FOR AN ARCHITECTURE.	VARCHAR2(35)
COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY	COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY CODE#	THE CODE THAT DENOTES A PARTICULAR AGENCY THAT IS REPRESENTED IN A COMMAND-CONTROL-SERVICE-DESIGNATOR.	CHAR(1)
COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE	COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE CODE#	THE CODE THAT DENOTES A KIND OF COMMAND-CONTROL-SERVICE-DESIGNATOR.	CHAR(2)
COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE	COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE CODE#	THE CODE THAT DENOTES A KIND OF COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE.	CHAR(1)
COMMUNICATION LINK TYPE	COMMUNICATION LINK TYPE CODE	THE CODE GIVEN TO THE COMMUNICATION LINK	VARCHAR2(1)
COMMUNICATION LINK TYPE	COMMUNICATION LINK TYPE NUMBER OF CHANNELS	THE NUMBER OF CHANNELS ON THE COMMUNICATION LINK TYPE	NUMBER(4)
COMMUNICATION-CIRCUIT	COMMUNICATION-CIRCUIT STATUS CODE	THE CODE THAT REPRESENTS THE STATE OF A COMMUNICATION-CIRCUIT.	VARCHAR2(35)
COMMUNICATION-CIRCUIT-TYPE	COMMUNICATION-CIRCUIT-TYPE CODE#	THE CODE THAT DENOTES A KIND OF COMMUNICATION-CIRCUIT.	VARCHAR2(35)
COMMUNICATION-LINK	COM_LNK_TY_CD	[Definition not provided in JCAPS 2.1]	VARCHAR2(1)
COUNTRY	COUNTRY CODE#	(14392) (A) THE CODE THAT REPRESENTS A COUNTRY.	CHAR(2)
DATA-ITEM-TYPE	DATA-ITEM-TYPE CLASS CODE	THE CODE THAT DENOTES A SPECIFIC GROUPING OF A DATA-ITEM-TYPE.	VARCHAR2(35)
DATA-ITEM-TYPE	DATA-ITEM-TYPE CODE#	THE CODE THAT DENOTES A KIND OF DATA-ITEM.	VARCHAR2(35)
DOCUMENT	DOCUMENT CATEGORY CODE	A CODE WHICH REPRESENT THE TYPE OF AFV2 PRODUCT	NUMBER(5)
ECHELON	ECHELON ABBREVIATION CODE	THE CODE THAT DENOTES AN ABBREVIATION FOR AN ECHELON.	VARCHAR2(35)
EXCHANGE-NEED-LINE-REQUIREMENT	EXCHANGE-NEED-LINE-REQUIREMENT AUTOMATION PRIORITY CODE	THE CODE THAT REPRESENTS HOW OPERATIONALLY IMPORTANT IT IS FOR A SPECIFIC EXCHANGE-NEED-LINE-REQUIREMENT TO BE PARSED AND PROCESSED AUTOMATICALLY.	VARCHAR2(35)
EXCHANGE-NEED-LINE-REQUIREMENT	EXCHANGE-NEED-LINE-REQUIREMENT AVAILABILITY INDICATOR CODE	THE CODE THAT REPRESENTS THE ASSESSMENT OF THE CURRENT CAPABILITY TO OBTAIN A PHYSICAL LINK FOR A SPECIFIC EXCHANGE-NEED-LINE-REQUIREMENT.	VARCHAR2(35)
EXCHANGE-NEED-LINE-REQUIREMENT	EXCHANGE-NEED-LINE-REQUIREMENT CRITICALITY CODE	THE CODE THAT REPRESENTS AN EVALUATION OF THE MISSION ESSENTIALITY OF A SPECIFIC EXCHANGE-NEED-LINE-REQUIREMENT.	VARCHAR2(35)
EXCHANGE-NEED-LINE-REQUIREMENT	EXCHANGE-NEED-LINE-REQUIREMENT FREQUENCY CONTINUITY TYPE CODE	THE TIME DISTRIBUTION OF OCCURRENCE OF USE OF AN EXCHANGE-NEED-LINE-REQUIREMENT.	VARCHAR2(35)
EXCHANGE-NEED-LINE-REQUIREMENT	EXCHANGE-NEED-LINE-REQUIREMENT SECURITY LEVEL CODE	THE CODE THAT SPECIFIES THE DEGREE OF PROTECTION FOR AN EXCHANGE-NEED-LINE-REQUIREMENT.	VARCHAR2(35)

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Table 9. (Cont'd)

Entity Name	Attribute Name	Attribute Definition from JCAPS 2.1	Datatype
EXCHANGE-NEED-LINE-REQUIREMENT	EXCHANGE-NEED-LINE-REQUIREMENT TIMELINESS CODE	THE CODE THAT CHARACTERIZES HOW QUICKLY INFORMATION SHOULD BE TRANSMITTED USING AN EXCHANGE-NEED-LINE-REQUIREMENT.	VARCHAR2(35)
FUNCTION	FUNCTION TYPE CODE	THE CODE THAT DENOTES A KIND OF FUNCTION.	VARCHAR2(35)
FUNCTIONAL-AREA	FUNCTIONAL-AREA TYPE CODE	THE CODE THAT REPRESENTS A KIND OF FUNCTIONAL-AREA.	VARCHAR2(35)
INFORMATION-EXCHANGE-REQUIREMENT	IER_TMLY_CD2	[Definition not provided in JCAPS 2.1]	VARCHAR2(35)
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT AVAILABILITY INDICATOR CODE	THE CODE THAT REPRESENTS THE ASSESSMENT OF THE CURRENT CAPABILITY TO OBTAIN THE INFORMATION FOR A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	VARCHAR2(35)
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT INFORMATION CLASS CODE	THE CODE THAT DENOTES THE TYPE OF DATA FOR A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	VARCHAR2(35)
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT INTEROPERABILITY LEVEL CODE	THE CODE THAT DENOTES THE CLASS OF TECHNICAL MEANS INTENDED TO BE USED FOR SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	VARCHAR2(35)
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT QUALITY CODE	THE CODE THAT REPRESENTS THE LEVEL OF CLARITY OF A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	VARCHAR2(35)
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT SECURITY LEVEL CODE	THE CODE THAT DESIGNATES THE GENERAL CLASS OF RESTRICTION FOR A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	VARCHAR2(35)
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT VOLUME INDICATOR CODE	THE CODE THAT REPRESENTS AN ESTIMATE OF THE AMOUNT OF RELEVANT INFORMATION THAT IS PROVIDED FOR A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	VARCHAR2(35)
INTERFACE TYPE	INTF_TY_AUTO_CD	[Definition not provided in JCAPS 2.1]	NUMBER(1)
INTERFACE TYPE	Y2K COMPLIANCE LEVEL CODE	THE CODE WHICH REPRESENTS THE LEVEL OF Y2K COMPLIANCE THIS INTERFACE MEETS	VARCHAR2(250)
MESSAGE	MESSAGE AVAILABILITY INDICATOR CODE	THE CODE THAT REPRESENTS THE ASSESSMENT OF THE CURRENT CAPABILITY TO OBTAIN THE INFORMATION FOR A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	VARCHAR2(50)
MISSION-AREA	MISSION-AREA TYPE CODE#	(16078) (A) THE CODE THAT DENOTES A CLASS OF MISSION-AREA.	VARCHAR2(35)
MISSION-AREA-FUNCTIONAL-AREA	MISSION-AREA-FUNCTIONAL-AREA ROLE CODE	THE CODE THAT DESIGNATES THE SPECIFIC WAY IN WHICH A FUNCTIONAL-AREA IS CITED FOR AN INSTANCE OF MISSION-AREA.	VARCHAR2(35)
ORGANIZATION	ECHOLON LEVEL CODE	A CODE WHICH DENOTES THE LEVEL OF THE ECHOLON OF THE ORGANIZATION	VARCHAR2(35)
ORGANIZATION	ORGANIZATION CATEGORY CODE	(23495) (A) THE CODE THAT REPRESENTS A CLASSIFICATION OF AN ORGANIZATION.	VARCHAR2(35)
ORGANIZATION	ORGANIZATION CLASSIFICATION CODE	(17043) (A) THE CODE THAT REPRESENTS A CATEGORIZATION OF AN ORGANIZATION.	VARCHAR2(35)

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Table 9. (Cont'd)

Entity Name	Attribute Name	Attribute Definition from JCAPS 2.1	Datatype
ORGANIZATION	ORGANIZATION DURATION TYPE CODE	(23496) (A) THE CODE THAT REPRESENTS A SPECIFIC KIND OF TIME FRAME ASSOCIATED WITH AN ORGANIZATION.	VARCHAR2(35)
ORGANIZATION	ORGANIZATION ENTERPRISE TYPE CODE	(32511) (A) THE CODE THAT DENOTES THE KIND OF ENTERPRISE UNDERTAKEN BY AN ORGANIZATION.	VARCHAR2(35)
ORGANIZATION	ORGANIZATION FRIEND FOE CODE	(11228) (A) THE CODE THAT DENOTES WHETHER A SPECIFIC ORGANIZATION IS FRIENDLY.	VARCHAR2(35)
ORGANIZATION	ORGANIZATION PRIMARY ACTIVITY CODE	(12712) (A) THE CODE THAT REPRESENTS THE PRINCIPAL BUSINESS FUNCTION OF AN ORGANIZATION.	VARCHAR2(35)
ORGANIZATION	ORGANIZATION PRIMARY INDUSTRY CATEGORY CODE	(12697) (A) THE CODE THAT REPRESENTS A CLASSIFICATION OF THE PRINCIPAL BUSINESS AREA OF AN ORGANIZATION.	VARCHAR2(35)
ORGANIZATION	ORGANIZATION TYPE CODE	(12705) (A) THE CODE THAT REPRESENTS A KIND OF ORGANIZATION.	VARCHAR2(35)
ORGANIZATION	ORGANIZATION VENDOR INDICATOR CODE	(16302) (A) A CODE THAT INDICATES THAT THE ORGANIZATION IS A VENDOR.	VARCHAR2(35)
ORGANIZATION	UIC CODE	THE UNIT IDENTIFIER CODE OF THE ORGANIZATION	VARCHAR2(35)
PROCESS-ACTIVITY	PROCESS-ACTIVITY UJTL CODE	THE CODE THAT DENOTES WHETHER THE PROCESS-ACTIVITY IS A UNIVERSAL JOINT TASK LIST (UJTL) TASK.	VARCHAR2(35)
RELATIONSHIP_ASN	RELATIONSHIP TYPE CODE	WHETHER OR NOT THE RELATIONSHIP BETWEEN THE ORGANIZATIONS IS PRIMARY OR CONTRIBUTING	VARCHAR2(35)
SOFTWARE ITEM VERSION	SW_IT_BLD_ST_CD	[Definition not provided in JCAPS 2.1]	VARCHAR2(35)
SOFTWARE ITEM VERSION	SW_IT_DII COE_CP_CD	[Definition not provided in JCAPS 2.1]	VARCHAR2(35)
SOFTWARE ITEM VERSION	SW_IT_DMS_CP_CD	[Definition not provided in JCAPS 2.1]	VARCHAR2(35)
SOFTWARE ITEM VERSION	SW_IT_OP_ST_CD	[Definition not provided in JCAPS 2.1]	VARCHAR2(35)
SOFTWARE ITEM VERSION	SW_IT_V_OP_ST_CD	[Definition not provided in JCAPS 2.1]	VARCHAR2(35)
SOFTWARE ITEM VERSION	SW_IT_Y2K_COMP_LVL_CD	[Definition not provided in JCAPS 2.1]	VARCHAR2(250)
SOFTWARE-ITEM	SOFTWARE-ITEM BUILD STATUS CODE	THE CODE THAT DENOTES THE STATUS OF A SOFTWARE-ITEM BUILD.	VARCHAR2(35)
SOFTWARE-ITEM	SOFTWARE-ITEM CATEGORY CODE	THE CODE THAT DENOTES THE CLASS OF A SOFTWARE-ITEM.	VARCHAR2(35)
SOFTWARE-ITEM	SOFTWARE-ITEM DII COE COMPLIANCE CODE	THE CODE THAT DENOTES WHETHER OR NOT THE CURRENT VERSION OF A SOFTWARE-ITEM COMPLIES WITH THE DII COE.	VARCHAR2(35)
SOFTWARE-ITEM	SOFTWARE-ITEM DMS COMPLIANCE CODE	THE CODE THAT DENOTES WHETHER OR NOT THE CURRENT VERSION OF A SOFTWARE-ITEM COMPLIES WITH THE DEFENSE MESSAGING SYSTEM.	VARCHAR2(35)
SOFTWARE-ITEM	SOFTWARE-ITEM OPERATIONAL STATUS CODE	THE CODE THAT DENOTES THE OPERATIONAL STATUS OF THE CURRENT VERSION OF A SOFTWARE-ITEM.	VARCHAR2(35)
SOFTWARE-ITEM	SOFTWARE-ITEM SOURCE TYPE CODE	THE CODE THAT REPRESENTS THE SOURCE OF A SOFTWARE-ITEM.	VARCHAR2(35)
SOFTWARE-ITEM	SOFTWARE-ITEM TYPE CODE	THE CODE THAT DENOTES A KIND OF SOFTWARE-ITEM.	VARCHAR2(35)

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Table 9. (Cont'd)

Entity Name	Attribute Name	Attribute Definition from JCAPS 2.1	Datatype
SOFTWARE-ITEM	SOFTWARE-ITEM VERSION OPERATIONAL STATUS CODE	THE CODE THAT DENOTES THE OPERATIONAL STATUS OF A PARTICULAR VERSION OF A SOFTWARE-ITEM.	VARCHAR2(35)
SOFTWARE-ITEM	SW_IT_COTS_GOTS_CD	[Definition not provided in JCAPS 2.1]	VARCHAR2(35)
SYSTEM	SY_XMT_CLS_CD	[Definition not provided in JCAPS 2.1]	VARCHAR2(50)
SYSTEM	SYSTEM CLASSIFICATION CODE	THE CODE THAT DENOTES THE LEVEL OF SECURITY CLASSIFICATION OF A SYSTEM.	VARCHAR2(35)
SYSTEM	SYSTEM IMPLEMENTATION VERSION OPERATIONAL STATUS CODE	THE CODE THAT DENOTES THE OPERATIONAL STATUS OF A SPECIFIC VERSION OF A SPECIFIC IMPLEMENTATION OF A SYSTEM.	VARCHAR2(35)
SYSTEM	SYSTEM LEGACY MIGRATION SYSTEM CODE	THE CODE THAT DENOTES WHETHER OR NOT THE SYSTEM IS A LEGACY SYSTEM TARGETED FOR MIGRATION.	VARCHAR2(35)
SYSTEM	SYSTEM MOBILITY CODE	THE CODE THAT DENOTES WHETHER OR NOT A SYSTEM IS MOBILE.	VARCHAR2(35)
SYSTEM	SYSTEM PURPOSE CODE	THE CODE THAT DESIGNATES THE OBJECTIVE OF A SPECIFIC SYSTEM.	VARCHAR2(35)
SYSTEM	SYSTEM STATUS CODE	THE CODE THAT DENOTES THE CURRENT STATUS OF A SYSTEM.	VARCHAR2(35)
SYSTEM	UIC_CD	[Definition not provided in JCAPS 2.1]	VARCHAR2(35)
SYSTEM	COMM_MODE	[Definition not provided in JCAPS 2.1]	VARCHAR2(250)
TRANSMISSION INFO			
SYSTEM TYPE TRANSMISSION INFO	COMM_MODE	[Definition not provided in JCAPS 2.1]	VARCHAR2(250)
SYSTEM-ASSOCIATION	SYSTEM-ASSOCIATION INTERFACE TYPE CODE	THE CODE THAT DESIGNATES THE CLASS OF INTEROPERATING RELATIONSHIP BETWEEN TWO SYSTEMS IN A SYSTEM-ASSOCIATION.	VARCHAR2(35)
SYSTEM-ASSOCIATION	SYSTEM-ASSOCIATION INTEROPERABILITY LEVEL CODE	THE CODE THAT DESIGNATES THE APPLICABLE KIND OF INTEROPERABILITY BETWEEN TWO SYSTEMS.	VARCHAR2(35)
SYSTEM-ASSOCIATION	SYSTEM-ASSOCIATION TYPE CODE	THE CODE THAT DENOTES THE KIND OF SYSTEM-ASSOCIATION.	VARCHAR2(35)
SYSTEM-TYPE	SY_TY_CD	[Definition not provided in JCAPS 2.1]	CHAR(4)
SYSTEM-TYPE	SY_TY_STAT_CD	[Definition not provided in JCAPS 2.1]	VARCHAR2(20)
SYSTEM-TYPE	SY_TY_Y2K_COMP_CD	[Definition not provided in JCAPS 2.1]	CHAR(3)
SYSTEM-TYPE	Y2K_COMP_LVL_CD	[Definition not provided in JCAPS 2.1]	VARCHAR2(250)
UNIVERSAL-JOINT-TASK-LIST-TASK	UJTL_LVL_WAR_CD#	[Definition not provided in JCAPS 2.1]	CHAR(2)
UNIVERSAL-JOINT-TASK-LIST-TASK	UNIVERSAL-JOINT-TASK-LIST-TASK HIERARCHY SEQUENCE CODE#	THE CODE THAT DENOTES THE SEQUENCE OF A SPECIFIC TASK IN THE HIERARCHY OF UNIVERSAL-JOINT-TASK-LIST TASKS.	CHAR(10)
USER CODE	USER_CD#	[Definition not provided in JCAPS 2.1]	CHAR(1)
VISUAL-REPRESENTATION-SYMBOL	TEMP_PENVIR_CD	[Definition not provided in JCAPS 2.1]	VARCHAR2(35)
VISUAL-REPRESENTATION-SYMBOL	VISUAL-REPRESENTATION-SYMBOL TYPE CODE	THE CODE WHICH REPRESENTS THE TYPE OF VISUAL-REPRESENTATION-SYMBOL	VARCHAR2(35)
WORKSPACE	SHARE CATEGORY CODE	THE CODE USED TO CATEGORIZE THE USERS' WORKSPACE FOR USE IN JCAPS DATA SHARING	VARCHAR2(35)
Y2K COMPLIANCE LEVEL CODE	Y2K COMPLIANCE LEVEL CODE#	THE CODE WHICH DENOTES A Y2K COMPLIANCE LEVEL	VARCHAR2(50)

Key: # = Attribute used as a primary key attribute in JCAPS 2.1.

III. PROPOSALS TO ACHIEVE CADM CONFORMANCE

This chapter specifies a large number of proposals under which the JCAPS 2.1 database could be converted to a CADM-conformant database. Many of the Army CADM implementation recommendations are included. Annexes J, K, L, and M provide a complete specification of the proposed data model described in this chapter.

A. DEFINITION OF CONFORMANCE

A strong notion of CADM conformance has been agreed within the Army architecture database and tool development community in a forum known as the Data Synchronization Working Group [Ref. CADM Conf. 2000]. This notion is consistent with the Navy recommendation for conformance (see Section III.C.1.b). The stated goal of conformance is to ensure fully faithful information transfer among databases, which cannot happen if the primary keys of one database have no correlation to the primary keys of another database for the same entity. The notes with each conformance principle identified below address questions and suggestions contributed by JCAPS users when the draft was circulated in May 2000 [Refs. JCAPS 2000b; BAH 2000; SBSI 2000; USSOCOM 2000; USSTRATCOM2000; USTRANSCOM 2000].

A CADM-conformant data model, database, or physical schema must have a logical data model that meets the following principles:

- The conforming model will be based on (that is, include) a subset of the CADM.
 - Not all the entities of the CADM are required.
 - Not all of the attributes of selected entities are required (although when exchanging data with other CADM-compliant sources, missing attributes will cause data to be lost on import).
 - At a minimum, the conforming model should include those attributes required to generate its architecture products.
 - The CADM 2.0 report [Ref. CADM 2.0 1998] identifies the entities that apply to each architecture product.
- The conforming model may include extensions of the CADM subset (but none of the extensions will be redundant with elements of the CADM itself).
 - Extensions can include new attributes to CADM entities and new entities.

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- When new entities are introduced, implementors should consider whether they can be managed as one-to-zero-or-one ("Z") children or subtypes of entities already in the CADM (thus avoiding introducing many new key attributes; existing key attributes can be redefined as alternate identifiers if these attributes are needed to faithfully track the source data).
- For example, in implementing Army-unique architecture requirements and products, entities such as ARMY-ORGANIZATION, ARMY-MATERIEL-ITEM, and ARMY-ORGANIZATION-TYPE-ESTABLISHMENT were introduced as "Z" children of ORGANIZATION, MATERIEL-ITEM, and ORGANIZATION-TYPE-ESTABLISHMENT, respectively. Other examples include introducing OPERATIONAL-ELEMENT, OPERATIONAL-FACILITY, COMMAND-POST, and COMMAND-POST-CELL as subtypes of ORGANIZATION-TYPE.
- Extensions to the CADM should eventually be submitted to a CADM coordination group for assessment and eventual incorporation into the CADM. [Ref. USSTRATCOM 2000]
- Agreed datatypes and coded domains must be used.
 - CADM 2.0 did not specify datatypes, field lengths, or the actual codes expected to be used in physical implementations.
 - For the present, the datatypes, field lengths, and codes agreed for use in the Army extension to the CADM are recommended; integration of these physical details with those contained in the Navy extension for the DIAD (and others, where appropriate) will need to be considered in the future.
 - Following the lead of DISA's Army Data Management Team in improving DoD data standards (for database management efficiency), most identifiers are typed as 32-bit integers (giving 4.3 billion instances), and most coded attributes are typed as small (16-bit) integers (giving more than 65,000 instances). When the 64-bit integer datatype becomes commonly available, that datatype is expected to be adopted for identifiers (giving 18 quintillion instances).
 - Agreements on 18-character access names are also needed, both for the physical instantiations of entities (e.g., tables) and of attributes (e.g., columns).
- Points of contact should be identified and consulted when generating instances of keys (to avoid redundancy and non-uniqueness).
 - Points of contact could be established on an entity basis (one for each entity).
 - The points of contact are responsible for assigning blocks of identifiers to various implementors and for making available instances of the entities associated with those identifiers as they become available from the various implementors.
 - Implementors are expected to make a good faith effort to avoid assigning more than one identifier to an instance (e.g., by examining the already-assigned instances before generating new keys).
- Keys for attributes taken from the CADM should be identical with or directly derivable from keys specified in CADM (alternate keys may be used but CADM keys need to be preserved).

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- The primary key for an entity and for all its descriptive attributes is a set of one or more attributes of that entity (shown above the line inside the entity in an IDEF1X diagram) whose values together identify a unique instance of the entity.
- Primary key attributes of data models in third normal form must be always not null and never take on the same value for different instances of the entity.
- Often there are additional sets of attributes (including one or more of the primary key attributes) that could also serve as a primary key or otherwise serve as indexes for entity instances. CADM conformance allows implementors to employ such attributes as the primary key for a specific implementation, so long as unique values are maintained for the CADM primary key attributes.
- In addition, CADM conformance allows an implementor to create a new primary key attribute for an entity, so long as unique values are maintained for the CADM primary key attributes.
- Preserving CADM primary key attributes (i.e., the keys) enables the originators of architecture data to maintain audit trails on exported data. Overwriting or deleting the values of CADM primary key attributes during data import destroys this audit trail and makes difficult or impossible the task of determining responsibility for data accuracy and integrity.

B. SUMMARY OF IDA PROPOSALS

1. JCAPS As a View of the CADM

The IDA proposal for making JCAPS 2.1 conformant to the CADM is to construct a JCAPS View of CADM 2.0 (as extended during the last 2 years by the Army and Navy). This view is constructed by choosing 122 already-defined entities as follows:⁸

- 86 entities from CADM 1.0—of these, 63 are also in the Navy DIAD data model
- 11 entities from CADM 2.0 that were not included in CADM 1.0—of these, 8 are also in the Navy DIAD data model
- 10 entities defined during the creation of CADM 2.0 but left out of the agreed CADM 2.0 data model diagram (five were for the Army Systems Architecture, three were for modeling and simulation location, and two were subtypes of NODE-LINK)—of these, three are also in the Navy DIAD data model
- 1 entity from the Navy extensions to CADM 2.0
- 14 entities from the Army extensions to CADM 2.0.

These 122 entities were chosen after a detailed mapping of JCAPS 2.1 data requirements to the CADM (described below; the mapping is summarized at the entity level in Annex E and at

⁸ As many as 67 of the 122 entities are in the Navy DIAD data model (Version 1.5).

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the attribute level in Annex F). The mapping showed that an additional 21 entities from JCAPS 2.1 would need to be added to the CADM (with modifications to key structure, names, and definitions). Thus, a total of 143 entities comprise the IDA-recommended structure for JCAPS to achieve CADM conformance. These entities are depicted in the logical and physical data model diagrams of Annex J and listed with definitions and other specifications in Annex K. The relationships of the proposed JCAPS View of the CADM are identified and described in Annex L, and the attribute specifications are provided in Annex M. The entity and attribute specifications include physical table names (for the entities) and column names (for the attributes), datatypes, null options, and domain values.

2. Adequacy of IDA Proposals

Analysis of completeness for the proposed entities of the IDA-recommended JCAPS View of the CADM follows the same technique used in CADM 2.0 to verify its completeness with respect to the C4ISR Architecture Framework Version 2.0 [Ref. Framework 1997b]. This technique first lists all the data requirements underlying JCAPS 2.1 and second provides annotation of this list to show how every data requirement is supported by the IDA-recommended data model.

Annex E shows how each of the 78 entities of JCAPS 2.1 is supported by the proposed JCAPS View of the CADM. Since 21 JCAPS entities have been added to the CADM, these entities are supported in ways that are identical to their role in JCAPS (the label "{JCAPS}" was appended to the name of each of these entities in the JCAPS View of the CADM). Further, 16 entities from JCAPS have names that are identical with CADM entities and are therefore supported by those CADM entities. JCAPS entities such as ARM-CODE, ECHELON, CCSD-AGENCY, CCSD-PURPOSE-USE, and CCSD-TYPE-SERVICE are each supported in the JCAPS CADM View by a single attribute (ORGANIZATION-TYPE Arm Code, ORGANIZATION-TYPE Echelon Code, COMMUNICATION-CIRCUIT-TYPE CCSD Agency Code, etc.).

Complex JCAPS entities such as COMMAND-CONTROL-ELEMENT are supported by more than one entity in the JCAPS View of the CADM. In JCAPS 2.1 COMMAND-CONTROL-ELEMENT stores instances labeled as operational facilities (OPFACs) in the user presentations. These instances are duplicated as many times as they occur in diagrams and thus the entity COMMAND-CONTROL-ELEMENT serves the role of NODE as well as the organizational entity represented by the NODE. Thus, in the proposed JCAPS View of the CADM, all of the entities NODE, NODE-ORGANIZATION, NODE-ORGANIZATION-TYPE, ORGANIZATION, and ORGANIZATION-TYPE are used in the CADM to support the "rolled-up" concept of a COMMAND-CONTROL-

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ELEMENT. Another complex entity in JCAPS is SYSTEM, which represents—at a specific COMMAND-CONTROL-ELEMENT—information systems, communications systems, other types of systems, classes of equipment, and instances of equipment. SYSTEM in JCAPS thus “rolls up” the separate CADM concepts of NODE-SYSTEM, EQUIPMENT-TYPE, SYSTEM-EQUIPMENT-TYPE, and MATERIEL-ITEM, as well as Army CADM concepts of MATERIEL and NODE-MATERIEL. The JCAPS notion of SYSTEM-TYPE corresponds to the CADM entity SYSTEM, and the JCAPS concept of SYSTEM-CATEGORY corresponds to the CADM entity SYSTEM-TYPE.

The 21 entities identified as implementation specific in JCAPS are classified as not applicable to this mapping, since they do not capture sharable data. It is understood that some or all of these entities, perhaps in a different form, would be added by the JCAPS implementor to support data management and specific user presentations. However, the entities chosen for the JCAPS View of the CADM include many entities related to NODE and NETWORK whose instances are captured in JCAPS 2.1 only as drawings using these implementation-specific entities. Use of the CADM entities will make the underlying data of these drawings (such as the node connectivity diagram) explicitly available for export to other CADM-conformant databases, as well as JCAPS user query and analysis. Annex E shows that all of the 57 non-implementation-specific entities of JCAPS 2.1 are supported by the entities and attributes of the proposed JCAPS View of the CADM. The entity-level mapping between JCAPS 2.1 and the proposed JCAPS View of the CADM is described at a more detailed level in next section (Section III.B.3).

Annex F provides a mapping of the JCAPS data requirements to the CADM at the JCAPS attribute level. As at the entity level, implementation-specific attributes are deemed not applicable for being part of the JCAPS View of the CADM. Each of the 641 attributes specified in the logical view of JCAPS 2.1 is listed in Annex F, together with its JCAPS definition and physical access (column) name. The last column on the right describes which entities and which attributes of those entities of the JCAPS View of the CADM can be used to capture the JCAPS data requirement. In some cases, more than one attribute is cited. All of the 641 attributes are shown in Annex F to be fully supported by (or not applicable to) the proposed JCAPS View of the CADM.

The 21 entities added to the CADM from JCAPS contain 145 attributes (85 are owned attributes and the rest are foreign key attributes⁹). Many of the attributes of JCAPS entities (other

⁹ Foreign key attributes are copies of primary key attributes belonging to a parent entity that are migrated to a child entity under some relationship. Each foreign key attribute in the child entity has exactly the same definition, datatype, and domain values as the primary key attribute in the parent entity; therefore, the foreign

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than the 21 entities copied into the CADM) were not initially supported by the CADM entity(ies) to which it was mapped (in Annex E). To provide support for these attribute-level data requirements, 92 new attributes were defined for CADM entities (2 of the 92 occur as foreign key attributes). These can be identified by the use of the label "{JCAPS}" appended to their name in the JCAPS View of the CADM (the attributes of JCAPS entities added to the CADM were also annotated with this label).

3. Entity-Level Summary of IDA Proposals

This section summarizes IDA's proposal by identifying all the entities of JCAPS 2.1 and indicating the rationale for including, replacing, or supplementing them in the recommended JCAPS View of the CADM. This section also identifies all the entities proposed for inclusion in the JCAPS View of the CADM, whether those entities were previously defined in CADM 2.0, added from JCAPS 2.1, added from the Army CADM, or added from the Navy extensions to the CADM for the DIAD. Each of the following paragraphs (with amplifying details) constitutes an IDA recommendation for JCAPS.

a. Use the CADM entities with the same name as the following JCAPS entities: ARCHITECTURE, ARCHITECTURE-DOCUMENT, COMMUNICATION-LINK, COMMUNICATION-MEDIUM, COUNTRY, DATA-ITEM, DATA-ITEM-TYPE, DOCUMENT, EXCHANGE-NEED-LINE-REQUIREMENT, FUNCTIONAL-AREA, MISSION-AREA, MISSION-AREA-FUNCTIONAL-AREA, ORGANIZATION, PROCESS-ACTIVITY, SOFTWARE-ITEM, and TASK-MISSION-AREA. Attributes defined in JCAPS not yet in these entities should be added to those entities.

- Add the following COMMUNICATION-LINK-related JCAPS entities to the CADM: CIRCUIT-IER-ASSOCIATION (an entity not yet related to any other in the CAPS data model, renamed COMMUNICATION-CIRCUIT-IER-ASSOCIATION); COMMUNICATION-CHANNEL; COMMUNICATION-LINK-TYPE; LINK-IER-ASSOCIATION (an entity not yet related to any other in the CAPS data model, renamed COMMUNICATION-LINK-IER-ASSOCIATION); COMMUNICATION-CIRCUIT; and COMMUNICATION-CIRCUIT-TYPE.
- Replace COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY in JCAPS with a new attribute of COMMUNICATION-LINK-TYPE (COMMUNICATION-LINK-TYPE CCSD Agency Code).

key attributes are sometimes considered "duplicates" when a complete listing of attributes is published. Note, however, that foreign key attributes can have a different ("role") name than the parent attribute and can have a different null option than the parent (foreign key attributes can sometimes be null but a primary key attribute is never null).

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- Replace COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE in JCAPS with a new attribute of COMMUNICATION-LINK-TYPE (COMMUNICATION-LINK-TYPE CCSD Purpose Use Code).
- Replace COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE in JCAPS with a new attribute of COMMUNICATION-LINK-TYPE (COMMUNICATION-LINK-TYPE CCSD Type Service Code).
- Replace the JCAPS attribute PROCESS-ACTIVITY Derivation with a new entity PROCESS-ACTIVITY-ASSOCIATION.
- Enable a PROCESS-ACTIVITY to be related to more than one task by introducing PROCESS-ACTIVITY-TASK from the CADM (at present, JCAPS assumes that a PROCESS-ACTIVITY comes from at most one TASK).
- Replace the JCAPS attribute Architect Name in ARCHITECTURE with POINT-OF-CONTACT in the CADM and a relationship from POINT-OF-CONTACT to ARCHITECTURE.
- Replace the JCAPS attribute Scenario Identifier in ARCHITECTURE with OPERATIONAL-SCENARIO in the CADM.
- As suggested by the Department of the Navy [Ref. DON-CIO 2000b], add a new entity MISSION-AREA-PROCESS-ACTIVITY to associate PROCESS-ACTIVITYs with MISSION-AREAs.

b. Replace COMMAND-CONTROL-ELEMENT (C2E) (termed OPFAC in the user presentation views) and COMMAND-CONTROL-ELEMENT-ORGANIZATION in JCAPS by NODE, ORGANIZATION, ORGANIZATION-TYPE, NODE-ORGANIZATION, and NODE-ORGANIZATION-TYPE from CADM 2.0. For the short term, as is being done today in JCAPS in software, it is possible that each NODE only represents one ORGANIZATION or one ORGANIZATION-TYPE, although such a restriction is not necessary. In addition:

- Replace the geographic coordinate attributes of C2E with the DoD standard entities POINT, MEASURED-ELEVATION-POINT, and ORGANIZATION-LOCATION from the modeling and simulation extension of CADM 2.0 (Section VI.C of the CADM 2.0 report [Ref. CADM 2.0 1998]; rename ORGANIZATION-LOCATION as ORGANIZATION-LOCATION-POINT).
- Replace ARM-CODE in JCAPS with DoD standard ORGANIZATION-TYPE Arm Code and ORGANIZATION-TYPE Arm Qualifier Code from CADM 2.0.
- Replace ECHELON in JCAPS with DoD standard ORGANIZATION-TYPE Echelon Code from CADM 2.0.
- Replace SERVICE in JCAPS with DoD standard ORGANIZATION-TYPE Service Code from CADM 2.0.

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- Replace COMMAND-CONTROL-ELEMENT Nation Name and the relationship from COUNTRY to ORGANIZATION in JCAPS with DoD standard COUNTRY and a relationship from COUNTRY to ORGANIZATION-TYPE.
- Replace RELATIONSHIP-ASN in JCAPS (an implementation-specific entity) with ORGANIZATION-ASSOCIATION in the CADM.
- To relate different ORGANIZATION-TYPEs, add ORGANIZATION-TYPE-ASSOCIATION in the CADM (ASA View).
- Replace USER-CODE in JCAPS with a new attribute of NODE: NODE CCSD User Code.
- c. Replace SYSTEM, SYSTEM-TYPE, and SYSTEM-CATEGORY in JCAPS by NODE-SYSTEM, SYSTEM, and SYSTEM-TYPE, respectively, from CADM 2.0.
 - Replace FUNCTION in JCAPS by SYSTEM-FUNCTION (a subtype of PROCESS-ACTIVITY) in the CADM.
 - Replace SYSTEM-IEM in JCAPS by INFORMATION-EXCHANGE-MATRIX and INFORMATION-EXCHANGE-MATRIX-ELEMENT in the CADM.
 - Merge SOFTWARE-ITEM-VERSION in JCAPS with SOFTWARE-ITEM since each instance of SOFTWARE-ITEM in the CADM is a specific release or version and since these releases and versions are directly related by SOFTWARE-ITEM-ASSOCIATION in the CADM (ASA View).
 - Replace SYSTEM-TYPE-SOFTWARE-ITEM-VERSION in JCAPS with SYSTEM-SOFTWARE-ITEM in the CADM.
 - Replace SYSTEM-TYPE-ASSOCIATION in JCAPS with SYSTEM-ASSOCIATION in the CADM.
 - Replace SYSTEM-CATEGORY Parent Id in JCAPS with SYSTEM-TYPE-ASSOCIATION, which can capture more than one hierarchical or other type of association among instances of SYSTEM-TYPE.
 - Add the following NODE-SYSTEM-related JCAPS entities to the CADM:
 - ASSET-OWNERSHIP (renamed NODE-SYSTEM-ASSET-OWNERSHIP)
 - COST-MANAGEMENT (renamed NODE-SYSTEM-COST-MANAGEMENT)
 - SYSTEM-TRANSMISSION-INFO (renamed NODE-SYSTEM-TRANSMISSION)
 - SYSTEM-SOFTWARE-ITEM-VERSION (renamed NODE-SYSTEM-SOFTWARE-ITEM)
 - SYSTEM-ASSOCIATION (renamed NODE-SYSTEM-ASSOCIATION)
 - INTERFACE
 - INTERFACE-TYPE.
 - Add the following SYSTEM-related JCAPS entities to the CADM: SYSTEM-TYPE-TRANSMISSION-INFO (renamed SYSTEM-TRANSMISSION) and SYSTEM-TYPE-INTERFACE-TYPE (renamed SYSTEM-INTERFACE-TYPE).

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- Replace Y2K-COMPLIANCE-LEVEL-CODE (an entity not yet related to any other in the CAPS data model) with the following attributes: INTERFACE-TYPE Year 2000 Compliance Level Code, SOFTWARE-ITEM Year 2000 Compliance Level Code, and SYSTEM Year 2000 Compliance Level Code.

d. Replace MESSAGE in JCAPS with INFORMATION-ELEMENT and MESSAGE-STANDARD from CADM 2.0. Note that INFORMATION-ELEMENT (formerly called ICOM) is used in the CADM to represent the information content of a specific data flow, and MESSAGE-STANDARD is used to characterize a standard format for information.

- Parent entities AGREEMENT and STANDARD for MESSAGE-STANDARD in the CADM should be introduced into JCAPS.
- MESSAGE-STANDARD-INFORMATION-ELEMENT in the CADM should be introduced into JCAPS to specify the information content of cited instances of MESSAGE-STANDARD.
- INFORMATION-ELEMENT-ASSOCIATION (formerly called ICOM-ASSOCIATION) in the CADM should be introduced into JCAPS so that INFORMATION-ELEMENTs can be grouped and otherwise related to each other.

e. Restructure EXCHANGE-NEED-LINE-REQUIREMENT and INFORMATION-EXCHANGE-REQUIREMENT in JCAPS as subtypes of INTEROPERABILITY-REQUIREMENT (formerly called simply REQUIREMENT), which is a subtype of GUIDANCE; and include a third subtype, INFORMATION-REQUIREMENT, of GUIDANCE from the CADM as well as GUIDANCE itself.

- Note that most of the attributes of INFORMATION-EXCHANGE-REQUIREMENT in JCAPS are actually attributes of INFORMATION-REQUIREMENT.¹⁰
- Note that making INFORMATION-EXCHANGE-REQUIREMENT a direct subtype (with only the GUIDANCE Identifier as the primary key attribute) is a simplification of key structure for INFORMATION-EXCHANGE-REQUIREMENT found in JCAPS that has been adopted by the Army CADM and now recommended for all CADM implementations.
- A non-identifying relationship from INFORMATION-ELEMENT to INFORMATION-REQUIREMENT found in the CADM links the requirement to actual content.

¹⁰ CADM 1.0 defined two subtypes of REQUIREMENT: EXCHANGE-NEED-LINE-REQUIREMENT (organizational elements who need to exchange) and INFORMATION-EXCHANGE-REQUIREMENT (the content of the exchange data). A third associative entity between these two, EXCHANGE-NEED-LINE-IER, was introduced in CADM 2.0. Since most architects think of this third entity (which has both the need line and its content) as an IER, IDA recommends the latter entity be called INFO-EXCH-REQ or IER and the entity formerly named INFORMATION-EXCHANGE-REQUIREMENT be renamed simply INFORMATION-REQUIREMENT. These new names are used in the recommended data model for JCAPS (as well as in the Army CADM).

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- To enable JCAPS to relate the various instances of GUIDANCE (to include INTEROPERABILITY-REQUIREMENTS and its subtypes), GUIDANCE-ASSOCIATION should be included in JCAPS.
- Non-identifying relationships from INFORMATION-REQUIREMENT to INFO-EXCH-REQ and from EXCHANGE-NEED-LINE-REQUIREMENT to INFO-EXCH-REQ relate each INFO-EXCH-REQ to its need line and to its information content.
- Replace DOCUMENT-IER-ASSOCIATION (an entity not yet related to any other in the CAPS data model) in JCAPS with GUIDANCE-DOCUMENT (since INFO-EXCH-REQ is a subtype of INTEROPERABILITY-REQUIREMENT, which is a subtype of GUIDANCE).
- Add the JCAPS entity INTERFACE-IER-ASSOCIATION (an entity not yet related to any other in the JCAPS data model) with explicit relationships from INTERFACE and INFO-EXCH-REQ.

f. Replace UNIVERSAL-JOINT-TASK-LIST-TASK with TASK, MISSION-ESSENTIAL-TASK, MISSION-ESSENTIAL-TASK-LIST, and MISSION-ESSENTIAL-TASK-LIST-ELEMENT from the CADM. To relate tasks, one to another, TASK-ASSOCIATION should be added from the CADM.

g. Retain the following three entities supporting user-defined properties, subject to the condition that they be fully defined, that attributes be properly named with appropriate class word, that the attributes be fully defined, and that domains be defined for all coded attributes:

- USER-DEF-PROPS (renamed USER-DEFINED-PROPERTY)
- USER-DEF-PROP-DICT (renamed USER-DEFINED-PROPERTY-DICTIONARY)
- USER-DEF-PROP-DICT-ENUMS (renamed USER-DEFINED-PROPERTY-DICTIONARY-ENUMERATION)

The following entities from the CADM should be used to express explicit requirements regarding security classification: CAVEATED-SECURITY-CLASSIFICATION, DOCUMENT-CAVEATED-SECURITY-CLASSIFICATION, SECURITY-ACCESS-COMPARTMENT, and SECURITY-CLASSIFICATION.

Some of the 21 JCAPS entities that were determined to be implementation specific (Table 4, above) may not be needed in future JCAPS implementations, depending on the degree to which JCAPS specifies architectural information embedded in the JCAPS drawings in the NODE-related and other entities suggested for use in the CADM. The following entities could be used to explicitly store these architectural details and are therefore recommended for inclusion in JCAPS:

- For explicitly relating elements to a specific architecture (each carries ARCHITECTURE Identifier in its primary key): ARCHITECTURE-AGREEMENT, ARCHITECTURE-ASSOCIATION, ARCHITECTURE-DOCUMENT, ARCHITECTURE-INTEROPERABILITY-

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REQUIREMENT, ARCHITECTURE-NODE, ARCHITECTURE-ORGANIZATION, ARCHITECTURE-TASK, OPERATIONAL-ARCHITECTURE, SYSTEM-ARCHITECTURE, and TECHNICAL-ARCHITECTURE. To support these associations, the entity PERIOD should be added from the CADM.

- For explicitly relating a node (DRAWPOINT or C2E) to what it represents (each carries NODE Identifier in its primary key): NODE-COMMUNICATION-MEDIUM, NODE-DATA-ITEM-TYPE, NODE-HIERARCHY, NODE-LINK, NODE-LINK-CAPABILITY, NODE-LINK-COMMUNICATION-MEDIUM, NODE-MATERIEL, NODE-MISSION-AREA, NODE-ORGANIZATION, NODE-ORGANIZATION-TYPE, NODE-PROCESS-ACTIVITY, NODE-SYSTEM, and NODE-TASK. To support these associations, the entity CAPABILITY should be added from the CADM.
- For explicitly relating a node with other nodes (a NETWORK is a collection of NODEs and NODE-LINKs in which some NODEs may have a special role): INFORMATION-LINK, NODE-ASSOCIATION, NODE-ASSOCIATION-NETWORK, NODE-HIERARCHY, NODE-LINK, NETWORK, NETWORK-ASSOCIATION, NETWORK-NODE, NODE-TREE, and NODE-TREE-NODE-HIERARCHY.
- For explicitly relating networks and node associations to their characteristics: NETWORK-ORGANIZATION, NODE-ASSOCIATION-INTEROPERABILITY-REQUIREMENT (named NODE-ASSOCIATION-REQUIREMENT in CADM 2.0), NODE-LINK-CAPABILITY, and NODE-LINK-COMMUNICATION-MEDIUM.
- For relating different architecture products (in the CADM, each architecture product is a subtype of DOCUMENT): DOCUMENT-ASSOCIATION.

At present, JCAPS does not distinguish SYSTEM from its hardware elements. The following DoD Standard entities from the CADM are recommended for JCAPS: EQUIPMENT-TYPE, MATERIEL (ASA View), MATERIEL-ASSOCIATION (ASA View), MATERIEL-ITEM, and MATERIEL-ITEM-CAPABILITY-NORM. The following related entities from the CADM are recommended: EQUIPMENT-TYPE-SOFTWARE-ITEM, MATERIEL-ITEM-ASSOCIATION (new), MATERIEL-ITEM-COST (new), and SYSTEM-EQUIPMENT-TYPE.

The following SYSTEM-related entities from the CADM are recommended to provide more detailed specifications required in System Architecture architectural products: INTERFACE-CONTROL-DOCUMENT, SYSTEM-CAPABILITY, SYSTEM-INTERFACE-DESCRIPTION, SYSTEM-INTERFACE-DESCRIPTION-ELEMENT, SYSTEM-ORGANIZATION, SYSTEM-SECURITY-CLASSIFICATION, SYSTEM-SYSTEM-MATRIX, and SYSTEM-SYSTEM-MATRIX-ELEMENT.

The following entities could be used to further specify the details of information exchange requirements and are therefore recommended for inclusion in JCAPS: INFO-EXCH-REQ-ASSURANCE (new to CADM), INFO-EXCH-REQ-ELEMENT (ASA View of CADM), INFO-EXCH-REQ-ELEMENT-METHOD (ASA View of CADM), INFO-EXCH-REQ-ELEMENT-PRODUCT (ASA

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View of CADM), BATTLEFIELD-AUTOMATED-SYSTEM (Army C4RDP), COMMUNICATION-SYSTEM, COMMUNICATION-SYSTEM-TRANSMISSION (Army C4RDP), EXCHANGE-RELATIONSHIP-TYPE (Army C4RDP), INFORMATION-REQUIREMENT-DATA-ITEM-TYPE (name changed from IER-DATA-ITEM-TYPE in the CADM), INTEROPERABILITY-REQUIREMENT-TASK (name changed from REQUIREMENT-TASK in the CADM), and REQUIRED-INTEROPERABILITY-CAPABILITY (name changed from REQUIRED-CAPABILITY in the CADM).

The following entities defined in CADM 2.0 are used to characterize a sequence of IERs as a mission thread and should therefore be added to JCAPS: MISSION, OPERATIONAL-MISSION-THREAD (ASA View), and OPERATIONAL-MISSION-THREAD-ELEMENT (ASA View) for which the name has been changed from OPERATIONAL-MISSION-THREAD-IER.

C. PROPOSAL DETAILS

1. Sources of JCAPS Recommendations

Both the Army and the Navy have been extending and adapting the CADM since the CADM 2.0 report was published in December 1998 [Ref. CADM 2.0 1998]. Since IDA has been heavily involved in the Army extensions to the CADM, the role and utility of those extensions have already been assessed. Detailed information on the primary Navy extension become available in the summer of 2000. The original IDA tasking from OSD was to first integrate the Army and Navy extensions and then produce recommendations for JCAPS. Due to the short time and limited resources that became available in FY2001, IDA was directed to provide recommendations for making JCAPS CADM conformant before integration of the Army and Navy extensions. Until the latter activity can be completed, the current IDA recommendations (especially those for physical schema details) are based on the Army extensions to the CADM.

a. Army CADM

The Army has been integrating the Army System Architecture (ASA) databases and database development tools as the ASA View of the CADM since January 1998. Early drafts of the ASA Data Model (ASADM) were circulated in April 1998 [Ref. ASADM 1998a] and June 1998 [Ref. ASADM 1998b]. The first formal draft of this ASA View appeared as Chapter V of the CADM 2.0 report [Ref. CADM 2.0 1998]. The ASADM provided physical properties such as table and column names, together with datatypes, codes for all domain values, and specific null options for its attributes [Ref. CADM 2.0 1998, Annex M]. In addition, beginning early in 1999, the Army has created a separate physical schema data model that merges tables when the primary key attributes of the tables are identical. Baseline 1.0 of the Army Systems Architecture

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Physical Schema (ASAPS) was agreed and published in September 1999 [Ref. ASAPS 1999c]. IDA has provided continuous technical support to the U.S. Army Office of the Director of Information Systems for Command, Control, Communications, and Computers (ODISC4) for the ASA data models from January 1998 to the present.

Beginning August 1999, the Army began integrating operational architecture databases into the ASA Data Model and changed the name of its product to the Army CADM (ARCADM) [Ref. ARCADM 1999a]. Army Architecture Database Synchronization Workshops have been held bimonthly since August 1999 to review the progress of the database integration work and to portray the agreements as an integrated architecture data model represented as a view of the CADM. The scope of the ARCADM is now all the following [Ref. ARCADM 2000h]:

- Army Systems Architecture Conceptual (ASA-C) developed by the U.S. Army Signal Center (SIGCEN) System Architecture Branch (SA) at Fort Gordon, Georgia
- Army Systems Architecture Detailed (ASA-D) developed by the U.S. Army Program Executive Officer-Command, Control, and Computer Systems (PEO-C3S) at Fort Monmouth, New Jersey
- C4 Requirements Definition Program (C4RDP) [TO&Es, IERs] by the SIGCEN C4RDP Branch at Fort Gordon
- Army Operational Architecture (AOA) Repository by the U.S. Army Training and Doctrine Command (TRADOC) Program Integration Office (TPIO) at Fort Leavenworth, Kansas
- Installation Information Infrastructure Architecture (I3A) with:
 - Target Architecture Model (TAM) developed by U.S. Army Information Systems Engineering Command (USAISEC), Fort Detrick Engineering Office (FDEO) at Fort Detrick, Maryland
 - Communications Requirements Information Management System—Warrior Reachback (CRIMS-WARR) by SIGCEN in early development at Fort Gordon
 - Future Architecture Model in early development by Janus Corporation for ODISC4
- Army Architecture Repository Management System (AARMS), in early development as a replacement to C4RDP and the AOA Repository by the SIGCEN C4RDP Branch at Fort Gordon.

Database integration work culminated in October 2000 with an agreed logical data model (ARCADM) and physical schema (PS-ARCADM). The physical schema data model reached Baseline 2.0 on 26 October 2000 [Ref. PS-ARCADM 2000] and has been under formal configuration management since 27 October 2000. The logical data model continues to be improved by adding new data requirements as they are identified. In particular, all the applicable

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JCAPS-unique data requirements (new entities and attributes of already defined entities) have now been added to the ARCADM (the phrase "{JCAPS}" appears at the end of each JCAPS-unique entity and attribute), and all JCAPS-unique entities, attributes, and relationships are shown in red in color presentations of the data model diagram (the diagrams provided in this report are black and white only). The recommended data model of JCAPS as a view of the CADM is embedded in the ARCADM as a subject matter view (F.01 JCAPS View 2) of the extended CADM diagram [Ref. ARCADM 2000h].

The integrated Army architecture data model view of this diagram (C. ASA View) currently contains 303 entities, of which 150 (49 percent) are from the CADM. It now includes 10 of the 21 JCAPS-unique entities recommended for the CADM.

b. Department of the Navy Integrated Architecture Database (DIAD)

The DIAD is the result of developing a CADM-compliant architecture database over the past year. It is an extension of the Naval Architecture Database (NAD), developed in 1997-1998 by the U.S. Navy Space and Naval Warfare Systems Command (SPAWAR), which supports C4ISR architecture [Refs. NAD 1997; NAD 1998a]. The DIAD extends the concepts of NAD to all functional areas. DON is also producing the DON Data Management and Interoperability Repository (DMIR). The DMIR is a CADM-compliant repository for the collection of metadata at the data element level to support data standardization, data integration, and interoperability assessments. It extends the constructs of CADM somewhat, since CADM does not address metadata at the same level of detail. There are linkages to the DIAD to enable mappings of data elements to the information elements they support. The DMIR will be compatible with the DDDS and will have an interface to the Navy's government off-the-shelf product Data Analysis and Reconciliation Tool (DART) [Ref. DART 1997]. A third architecture product developed by the DON is the Architecture Development Process Model (ADPM) [Ref. ADPM 2000], which is an architecture product included in the draft DoD Architecture Framework Version 2.1. [Ref. DON-CIO 2000d]

The DIAD documentation includes an IDEF1X data model diagram [Ref. DON-CIO 2000a] and a change request file [Ref. DON-CIO 2000b] that identifies Navy-recommended changes to the CADM. The data model diagram has separate views for DIAD 2.0, DIAD Baseline 2.0, DIAD 3.0, DIAD 4.0, and DIAD 5.0. The current view is DIAD Baseline 2.0, which has 51 entities (27 of these are in the CADM; the others have been added to extended CADM tables or to facilitate implementations). Nineteen of the 51 entities in DIAD Baseline 2.0 are implementation specific in that they provide details for the user presentation view (eight entities) or externalize domain values as look-up tables (11 entities). Table 10 identifies the

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remaining 32 entities of DIAD Baseline 2.0 and describes the extent to which they are applicable to current JCAPS (those from the CADM are shown in bold fonts).. All applicable entities were included in the recommended JCAPS view of the CADM. [Ref. SBSI 2000b]

DIAD 5.0 is the target data model for implementations in 2001. DIAD 5.0 has 190 entities. Of these, 160 entities are from the CADM, and 6 others are from the ASA View included in CADM 2.0 documentation. DIAD 5.0 has the same 19 implementation-specific entities as DIAD Baseline 2.0. The following are the five entities added in DIAD 5.0 (and in DIAD Baseline 2.0) to the CADM:

- **Exchange_Activity_Line_Requirement**—The association of source and destination activities for later use in defining Information Exchange Requirements; added to support the DON-CIO-recommended IER structure [included as PROCESS-ACTIVITY-ASSOCIATION in recommendations for JCAPS].
- **Facility_Supplement**—Supplemental information about a facility [not yet needed for JCAPS].
- **System_Supplement**—Supplemental information about a system [included as attributes for SYSTEM in recommendations for JCAPS].
- **Organization_Type_Supplement**—Supplemental information about an Organization-Type [not yet needed for JCAPS].
- **Process_Activity_Mission_Area**—Process activities (Tasks) applicable to a Mission Area [included as the entity MISSION-AREA-PROCESS-ACTIVITY in recommendations for JCAPS].

DIAD 5.0 contains all of the CADM 2.0 entities except entities that fall into the following categories [Ref. SBSI 2000b]:

- Associated with documentation and/or analysis
- Associated with product graphics
- Associated with OV-6 or SV-10 (which define rules, state transitions, and event traces)
- Not associated with included products for current revs
- Below level of detail needed for included products
- Under consideration for later release.

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Table 10. Entities from DIAD Baseline 2.0 Data Model View of CADM

ARCHITECTURE	Included in JCAPS Recommended View of CADM
ARCHITECTURE-ASSOCIATION	Included in JCAPS Recommended View of CADM
EXCHANGE-NEED-LINE-IER	Included in JCAPS Recommended View of CADM as INFO-EXCH-REQ (name change)
EXCHANGE-NEED-LINE-REQUIREMENT	Included in JCAPS Recommended View of CADM
Exchange_Activity_Line_Requirement	Included as PROCESS-ACTIVITY-ASSOCIATION
FACILITY	Not yet needed for JCAPS
FACILITY-TYPE	Not yet needed for JCAPS
Facility_Supplement	Not yet needed for JCAPS
INFORMATION-ASSET	Not yet needed for JCAPS
INFORMATION-ASSET-RELATION	Not yet needed for JCAPS
INFORMATION-ELEMENT [formerly ICOM]	Included in JCAPS Recommended View of CADM
INFORMATION-ELEMENT-ASSOCIATION	Included in JCAPS Recommended View of CADM
INFORMATION-EXCHANGE-REQUIREMENT	Included in JCAPS Recommended View of CADM as INFORMATION-REQUIREMENT (name change)
MISSION-AREA	Included in JCAPS Recommended View of CADM
NODE	Included in JCAPS Recommended View of CADM
NODE-ASSOCIATION	Included in JCAPS Recommended View of CADM
NODE-FACILITY	Not yet needed for JCAPS
NODE-HIERARCHY	Included in JCAPS Recommended View of CADM
NODE-ORGANIZATION-TYPE	Included in JCAPS Recommended View of CADM
NODE-PROCESS-ACTIVITY	Included in JCAPS Recommended View of CADM
ORGANIZATION-TYPE	Included in JCAPS Recommended View of CADM
ORGANIZATION-TYPE-ASSOCIATION {ASA}	Included in JCAPS Recommended View of CADM
ORGANIZATION-TYPE-MISSION-AREA	Not yet needed for JCAPS
Organization_Type_Supplement	Not yet needed for JCAPS
PROCESS-ACTIVITY	Included in JCAPS Recommended View of CADM
Process_Activity_Mission_Area	Included as MISSION-AREA-PROCESS-ACTIVITY
SYSTEM	Included in JCAPS Recommended View of CADM
System_Supplement	Included in JCAPS Recommended View of CADM using SYSTEM
SYSTEM-ASSOCIATION	Included in JCAPS Recommended View of CADM
SYSTEM-FUNCTION	Included in JCAPS Recommended View of CADM
SYSTEM-FUNCTION-TRACEABILITY-MATRIX-ELEMENT	Not yet needed for JCAPS
SYSTEM-PROCESS-ACTIVITY	Not yet needed for JCAPS

The following 19 implementation-specific entities from DIAD Baseline 2.0 are not included in this table:
 Architecture_Structure, Info_Elem_Structure, Information_Asset_Structure, Node_Structure,
 Organization_Type_Structure, System_Structure, User_Arch_Association, User_Data,
 zcode_ELNIER_pershabl_cd, zcode_ELNIER_prdnce_cd, zcode_ELNIER_prd_ty_cd,
 zcode_ENLR_autom_prtty_cd, zcode_ENLR_avail_ind_cd, zcode_ENLR_crit_cd, zcode_ENLR_freq_cntin_cd,
 zcode_ENLR_introp_lvl_cd, zcode_ENLR_timeliness_cd, zcode_IER_vol_ind_cd, zcode_SC_cd

In developing the DIAD, the Navy has interpreted CADM compliance in the same strict way as CADM-conformance is applied in this paper to JCAPS to support data sharing. This means DIAD is intended to adhere to all of the following elements of the CADM [Ref. SBSI 2000b]:

- Structure
- Relationships together with their referential integrity and cardinality rules
- Standard domain values
- Physical schema properties such as table names, column/field names, and column/field datatypes.

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Physical schema properties were not defined in the CADM 2.0 report. The DIAD uses the DDDS "Access Name" as the physical names for tables and fields for the CADM entities and attributes that came from the DoD Data Architecture (DDA). For the others, since there was no definitive guidance, the Navy's first choice was the JCAPS 2.1 physical model. Beyond this, a number of tables were created for lookups and to provide graphic user interface (GUI) and display information—these 19 tables noted above are not fundamental to the architecture data, are viewed as implementation specific, and will not require any changes to the CADM. [Ref. SBSI 2000b]

The Department of the Navy's Chief Information Officer (CIO) has an ongoing data management and interoperability initiative that will result in the metadata repository DMIR. DMIR will use the CADM to the maximum extent possible. DIAD and DMIR are being developed in concert so that the DIAD can pull detailed data model information such as might be in a logical (OV-7) or physical data model (SV-11) from the DMIR and so that the DMIR can pull activity model (OV-5) data necessary for interoperability analyses from the DIAD. The aim is to trace the DMIR data elements to the DIAD information elements so as to have full traceability from IERs to system data elements. [Ref. SBSI 2000b]

Table 11 lists all of the currently defined changes being requested by the Navy to CADM 2.0 in its next evolution [Ref. DON-CIO 2000b]. All these changes were considered in detail for the IDA-recommended data model for JCAPS. The last column on the right indicates the action taken as part of the IDA recommendations for JCAPS.

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Table 11. Navy Recommendations for Improving the CADM

Ref No	Navy Change Request Title	Navy Description of Change	Navy Estimated Impact Effect on CADM	IDA Action Taken
1	Process Activity to Mission Area	Create a new table Process_Activity_Mission_Area, to be able to relate process activities to mission areas. This is important for Non-C4ISR architectures where tasks do not exist.	Minor additional capability to allow for support of non-C4ISR architectures.	Added to JCAPS View of CADM.
2	Modifications to IER Tables	Modify EXCHANGE-NEED-LINE-REQUIREMENT, EXCHANGE-NEED-LINE-IER, and INFORMATION-EXCHANGE-REQUIREMENT entities and add new Exchange_Activity_Line_Requirement entity to provide for a more consistent development of IERs.	Moderate change in the way attributes are associated with IERs.	Added PROCESS-ACTIVITY-ASSOCIATION. Placement of attributes already based on multi-Service agreements.
3	Proposed changes to Accuracy	In the new entity Exchange_Activity_Line_IER, the field Accuracy should be more descriptive. Additional fields could be added to better describe and define accuracy.	(Move to STR)	No change. No specific proposal. New entity not in DIAD data model.
4	Use of Integer Indexes	Use integer instead of text for index data types.	Minor change in the data types for index tables, should improve execution performance of a CADM compliant database.	Already done for Army CADM and JCAPS View of CADM.
5	Modification of data type for Mission Type code	The table Mission Area has the field Mission Type Code (MA_TY_CD). This field is Text(2), but needs to be modified to Text(4) to allow for the domain values specified in CADM.	Very minor change in field size.	Changed to smallint and all domain values are now integer.
6	Modification to Information Asset Relation Table	For the table INFORMATION_ASSET_RELATION, add a new field subordinate_map. The purpose of this field is to create associations between Information Asset and Information Elements.	Minor addition of one attribute to a CADM entity.	Unclear--attribute is undefined and unable to accomplish stated purpose.
7	Process Activity to System Function	In order to relate process activities to system functions in the SYSTEM-FUNCTION-TRACEABILITY-MATRIX-ELEMENT entity, the following change is required: Rename the attribute, PROCESS-ACTIVITY IDENTIFIER, to System_Function_Identifier in the SYSTEM-FUNC	Minor change to the name of one attribute and minor addition of one relationship to allow for support of non-C4ISR architectures.	New name is System Function PROCESS-ACTIVITY Identifier (FK).
8	Node Category Code	The size of the field NODE_cat_cd was changed from 2 to 50 to accommodate the range of values in CADM.	Very minor change in field size.	Two-letter codes are sufficient for all values of this attribute.
9	NODE_FACILITY Role Code	The size of the field Role_Code was changed from 2 to 20 to accommodate the range of values in CADM.	Very minor change in field size.	The codes are now smallint.
10	NODE-HIERARCHY Relation Type Code	The size of the field NH_RELTN_TY_CD was changed from 1 to 50 to accommodate the range of values in CADM.	Very minor change in field size.	The codes are now smallint.
11	NODE-ASSOCIATION Category Code	The size of the field NA_cat_cd was changed from 1 to 50 to accommodate the range of values in CADM.	Very minor change in field size.	The codes are now smallint.
12	NODE-ASSOCIATION Type Code	The size of the field NA_ty_cd was changed from 1 to 50 to accommodate the range of values in CADM.	Very minor change in field size.	The codes are now smallint.
13	PROCESS-ACTIVITY Name	The size of the field PROC_ACTV_NM was changed from 59 to 255 to accommodate existing process activities whose names were greater than 59.	Very minor change in field size.	Changed to varchar(255).
14	SYSTEM Name	The size of the field SYS-NM was changed from 35 to 50 to accommodate existing systems whose names were greater than 35.	Very minor change in field size.	Name is now varchar(50).
15	PROCESS-ACTIVITY Category Code	The size of the field PA_cat_cd was changed from 2 to 50 to accommodate the range of values in CADM.	Very minor change in field size.	The codes are now smallint.

Note: CADM 2.0 published in December 1998 did not attempt to assign codes or specify agreed datatypes. Details for these implementation-specific requirements are now being put into Army CADM and JCAPS View of CADM.

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2. Entity-Level Recommendations

Table 12 provides the name and definition for the 21 entities from JCAPS that were added to the CADM. In three cases, there is not adequate documentation in JCAPS 2.1 to define the new entities: USER-DEFINED-PROPERTY {JCAPS}, USER-DEFINED-PROPERTY-DICTIONARY {JCAPS}, and USER-DEFINED-PROPERTY-DICTIONARY-ENUMERATION {JCAPS}. Complete specification of these entities and their attributes awaits additional information from the JCAPS Program Manager and the JCAPS implementation team.

Table 12. JCAPS Entities Added to the CADM

COMMUNICATION-CHANNEL {JCAPS}#	A LOGICAL PARTITION OF A PHYSICAL DEVICE OVER WHICH COMMUNICATIONS ARE CONVEYED.
COMMUNICATION-CIRCUIT {JCAPS}#	A CIRCUIT USED FOR COMMUNICATIONS.
COMMUNICATION-CIRCUIT-IER-ASSOCIATION {JCAPS}	THE RELATIONSHIP BETWEEN A COMMUNICATION-CIRCUIT AND AN INFORMATION EXCHANGE REQUIREMENT. Source JCAPS.
COMMUNICATION-CIRCUIT-TYPE {JCAPS}#	A KIND OF LOGICAL CIRCUIT FOR COMMUNICATIONS.
COMMUNICATION-LINK-IER-ASSOCIATION {JCAPS}	THE RELATIONSHIP BETWEEN A COMMUNICATION-LINK AND AN INFORMATION-EXCHANGE-REQUIREMENT.
COMMUNICATION-LINK-TYPE {JCAPS}#	THE GENERIC TYPES OF COMMUNICATION LINKS
INTERFACE {JCAPS}#	A GENERIC CONNECTION BETWEEN C2E'S (OPFAC'S) OR SYSTEMS
INTERFACE-IER-ASSOCIATION {JCAPS}	THE RELATIONSHIP BETWEEN AN INTERFACE AND INFORMATION EXCHANGE REQUIREMENT
INTERFACE-TYPE {JCAPS}#	THE GENERIC TYPE OF INTERFACE. Source JCAPS.
NODE-SYSTEM-ASSET-OWNERSHIP {JCAPS}	THE DESCRIPTION AND PERCENTAGE OF OWNERSHIP OF A NODE-SYSTEM. Source: JCAPS.
NODE-SYSTEM-ASSOCIATION {JCAPS}	AN ASSOCIATION OF A NODE-SYSTEM WITH ANOTHER NODE-SYSTEM.
NODE-SYSTEM-COST-MANAGEMENT {JCAPS}	THE DOLLAR AMOUNTS ASSOCIATED WITH VARIOUS ASPECTS OF THE MANAGEMENT OF A NODE-SYSTEM BY TIME PERIOD
NODE-SYSTEM-SOFTWARE-ITEM {JCAPS}#	THE RELATIONSHIP BETWEEN SYSTEM AND SOFTWARE ITEM VERSION
NODE-SYSTEM-TRANSMISSION {JCAPS}	THE TRANSMISSION INFORMATION ASSOCIATED WITH A SPECIFIC NODE-SYSTEM. Source: JCAPS.
PROCESS-ACTIVITY-ASSOCIATION # {JCAPS}	The relationship of one PROCESS-ACTIVITY to another PROCESS-ACTIVITY, independent of any activity model.
SYSTEM-INTERFACE-TYPE {JCAPS}#	THE RELATIONSHIP BETWEEN A SYSTEM AND AN INTERFACE-TYPE.
SYSTEM-TRANSMISSION {JCAPS}	THE TRANSMISSION INFORMATION ASSOCIATED WITH A SYSTEM. Source: JCAPS.
SYSTEM-TYPE-ASSOCIATION {JCAPS}#	The relationship of one SYSTEM-TYPE to another SYSTEM-TYPE. Source: JCAPS.
USER-DEFINED-PROPERTY {JCAPS}	TBD (JCAPS).
USER-DEFINED-PROPERTY-DICTIONARY {JCAPS}	TBD (JCAPS).
USER-DEFINED-PROPERTY-DICTIONARY-ENUMERATION {JCAPS}	TBD (JCAPS).

= Indicates entities also added to the Army CADM.

One entity—MISSION-AREA-PROCESS-ACTIVITY {DIAD}, defined as the association of a MISSION-AREA to a PROCESS-ACTIVITY—has been added to the CADM and the JCAPS View of the CADM based on recommendations from the Department of the Navy CIO [Ref. DON-CIO 2000b].

Ten entities recommended for inclusion in the JCAPS View of the CADM were identified in the CADM 2.0 report [Ref. CADM 2.0 1998] but not formally included in the

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CADM (at the time, there was no consensus on whether these supported data requirements for non-Army organizations; two were identified as for the future). These are the following (“N” is appended to those that also appear in the DIAD; “A” is appended to those that also appear in the Army CADM): COMMUNICATION-LINK, INFORMATION-LINK, ORGANIZATION-TYPE-ASSOCIATION (A, N), OPERATIONAL-MISSION-THREAD (A, N), OPERATIONAL-MISSION-THREAD-ELEMENT (A, N) (formerly named OPERATIONAL-MISSION-THREAD-IER), POINT (A), MEASURED-ELEVATION-POINT (A), ORGANIZATION-LOCATION-POINT (A) (formerly named ORGANIZATION-LOCATION), MATERIEL (A), and MATERIEL-ASSOCIATION (A). Note that POINT, MEASURED-ELEVATION-POINT, ORGANIZATION-LOCATION(-POINT), MATERIEL, and MATERIEL-ASSOCIATION are all DoD standards.

Fourteen entities recommended for inclusion in the JCAPS View of the CADM are extensions to the CADM developed for the Army CADM. None is included in the Navy CADM (DIAD). These 14 entities are listed in Table 13.

The remaining 97 entities recommended for inclusion in the JCAPS View of the CADM are all from CADM 2.0 (86 were originally defined in CADM 1.0). These entities are listed in Table 14; their definitions and other specifications can be found in Annex K.

Table 13. Entities from the Army CADM Added to JCAPS View of the CADM

Entity Name	Entity Definition
PROCESS-ACTIVITY-TASK	The association of a specific PROCESS-ACTIVITY with a specific TASK.
INFO-EXCH-REQ-ELEMENT-PRODUCT {ASA}	The arrangement of information that is exchanged between two or more communicating entities for a specific INFORMATION-EXCHANGE-REQUIREMENT. Source: C4RDP.
INFO-EXCH-REQ-ELEMENT-METHOD {ASA}	The method by which two or more communicating entities exchange information for a specific INFORMATION-EXCHANGE-REQUIREMENT. Source C4RDP.
INFO-EXCH-REQ-ELEMENT {ASA}	An element (person or equipment) involved in the requirements necessary to exchange information between two or more communicating entities for a specific INFORMATION-EXCHANGE-REQUIREMENT.
COUNTRY	(39) (A) A NATION OF THE WORLD.
MATERIEL-ITEM-COST	The estimated cost of acquiring and installing a specific MATERIEL-ITEM. Source: I3A Workshop at IDA, 12 January 2000.
INFO-EXCH-REQ-ASSURANCE	The sensitivities and properties of an INFORMATION-EXCHANGE-REQUIREMENT needed to ensure that the information is protected and occurs between and only between the designated Source and the designated Recipient. Source: Information Assurance Architecture Working Group, December 1999.
DOCUMENT-CAVEATED-SECURITY-CLASSIFICATION	The association of a DOCUMENT with a CAVEATED-SECURITY-CLASSIFICATION.
MATERIEL-ITEM-ASSOCIATION	The association of one MATERIEL-ITEM with another.
NODE-MATERIEL	The association of a specific NODE with a specific instance of MATERIEL.
SOFTWARE-ITEM-ASSOCIATION {ASA}	The association of one instance of SOFTWARE-ITEM with another instance of SOFTWARE-ITEM.
COMMUNICATION-SYSTEM-TRANSMISSION {ASA, C4RDP-CELIN}	The specification of valid COMMUNICATION-SYSTEMS for a specific communications-electronic MATERIEL-ITEM. Source: C4RDP.
EXCHANGE-RELATIONSHIP-TYPE {ASA, C4RDP}	The specification of a class of pairing for information exchange. Source: C4RDP.
BATTLEFIELD-AUTOMATED-SYSTEM {ASA, C4RDP}	A SYSTEM that manipulates and presents data. Source: CADM 1.0.

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Table 14. Entities from CADM 1.0 and CADM 2.0 Selected for the JCAPS View of the CADM

AGREEMENT	NODE-ASSOCIATION
ARCHITECTURE	NODE-ASSOCIATION-INTEROPERABILITY-REQUIREMENT
ARCHITECTURE-AGREEMENT	NODE-ASSOCIATION-NETWORK
ARCHITECTURE-ASSOCIATION	NODE-COMMUNICATION-MEDIUM
ARCHITECTURE-DOCUMENT	NODE-DATA-ITEM-TYPE
ARCHITECTURE-INTEROPERABILITY-REQUIREMENT	NODE-HIERARCHY
ARCHITECTURE-NODE	NODE-LINK
ARCHITECTURE-ORGANIZATION	NODE-LINK-CAPABILITY
ARCHITECTURE-TASK	NODE-LINK-COMMUNICATION-MEDIUM
CAPABILITY	NODE-MISSION-AREA
CAVEATED-SECURITY-CLASSIFICATION	NODE-ORGANIZATION
COMMUNICATION-MEDIUM	NODE-ORGANIZATION-TYPE
COMMUNICATION-SYSTEM	NODE-PROCESS-ACTIVITY
DATA-ITEM	NODE-SYSTEM
DATA-ITEM-TYPE	NODE-TASK
DOCUMENT	NODE-TREE
DOCUMENT-ASSOCIATION	NODE-TREE-NODE-HIERARCHY
EQUIPMENT-TYPE	OPERATIONAL-ARCHITECTURE
EQUIPMENT-TYPE-SOFTWARE-ITEM	OPERATIONAL-SCENARIO
EXCHANGE-NEED-LINE-REQUIREMENT	ORGANIZATION
FUNCTIONAL-AREA	ORGANIZATION-ASSOCIATION
GUIDANCE	ORGANIZATION-TYPE
GUIDANCE-ASSOCIATION	PERIOD
GUIDANCE-DOCUMENT	POINT-OF-CONTACT
INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)	PROCESS-ACTIVITY
INFORMATION-ELEMENT	REQUIRED-INTEROPERABILITY-CAPABILITY
INFORMATION-ELEMENT-ASSOCIATION	SECURITY-ACCESS-COMPARTMENT
INFORMATION-EXCHANGE-MATRIX (OV-3; SV-6)	SECURITY-CLASSIFICATION
INFORMATION-EXCHANGE-MATRIX-ELEMENT	SOFTWARE-ITEM
INFORMATION-REQUIREMENT (IER in CADM 2.0)	STANDARD
INFORMATION-REQUIREMENT-DATA-ITEM-TYPE	SYSTEM
INTERFACE-CONTROL-DOCUMENT	SYSTEM-ARCHITECTURE
INTEROPERABILITY-REQUIREMENT	SYSTEM-ASSOCIATION
INTEROPERABILITY-REQUIREMENT-TASK	SYSTEM-CAPABILITY
MATERIEL-ITEM	SYSTEM-EQUIPMENT-TYPE
MATERIEL-ITEM-CAPABILITY-NORM	SYSTEM-FUNCTION
MESSAGE-STANDARD	SYSTEM-INTERFACE-DESCRIPTION (SV-1)
MESSAGE-STANDARD-INFORMATION-ELEMENT	SYSTEM-INTERFACE-DESCRIPTION-ELEMENT
MISSION	SYSTEM-ORGANIZATION
MISSION-AREA	SYSTEM-SECURITY-CLASSIFICATION
MISSION-AREA-FUNCTIONAL-AREA	SYSTEM-SOFTWARE-ITEM
MISSION-ESSENTIAL-TASK	SYSTEM-SYSTEM-MATRIX (SV-3)
MISSION-ESSENTIAL-TASK-LIST	SYSTEM-SYSTEM-MATRIX-ELEMENT
MISSION-ESSENTIAL-TASK-LIST-ELEMENT	SYSTEM-TYPE
NETWORK	TASK
NETWORK-ASSOCIATION	TASK-ASSOCIATION
NETWORK-NODE	TASK-MISSION-AREA
NETWORK-ORGANIZATION	TECHNICAL-ARCHITECTURE
NODE	

3. Attribute-Level Recommendations

This section identifies some of the mappings required to take data stored in the JCAPS attributes and store that data in the attributes of the proposed JCAPS View of the CADM. The complete mapping at the attribute level is provided in Annex F.

1. Move all instances of C2E that pertain to specific units to the ORGANIZATION table; where a specific NODE is implied, create the applicable instances of NODE and NODE-

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ORGANIZATION. Create an instance of ORGANIZATION-TYPE whose identifier is the ORGANIZATION-TYPE Identifier (FK) in ORGANIZATION.

- a. Set ORGANIZATION Operational Element Indicator Code to the (new) value “2”—Serves as an operational facility (instance).
 - b. Store C2E Abbreviation Name as ORGANIZATION Current Abbreviated Name.
 - c. Store C2E Description Text as ORGANIZATION Description Text.
 - d. Translate C2E Nation Name to COUNTRY Code (FK) in ORGANIZATION-TYPE.
 - e. Store Echelon Identifier (FK) in C2E as ORGANIZATION-TYPE Echelon Code.
 - f. Store C2E Location (text) as NODE Location Text; create an instance ORGANIZATION-LOCATION-POINT and store the appropriate keys.
 - g. Create an instance of POINT and store C2E latitude and longitude as POINT Latitude Coordinate and POINT Longitude Coordinate, respectively.
 - h. Import ORGANIZATION instances from the Joint Operations Planning and Execution System (JOPES) tables for UNIT (set ORGANIZATION Classification Code = “U”—Uniformed Service and maintain association to UNIT-TYPE by setting the correct value of ORGANIZATION-TYPE Identifier (FK) in ORGANIZATION).
2. Populate ORGANIZATION-TYPE as in CADM/DoD Data Model, drawing instances from C2E that concern a class of ORGANIZATION but not a specific ORGANIZATION.
- a. Import data or create a separate instance of ORGANIZATION-TYPE for all combinations of country, service, echelon, and arm codes that occur in ORGANIZATION or in new instances of ORGANIZATION transferred from C2E.
 - b. Structure ORGANIZATION-TYPE with the following (DoD standard) attributes:
 - COUNTRY CODE (FK) through a non-identifying nulls-allowed, relationship “pertains to” from COUNTRY to ORGANIZATION-TYPE [data type is varchar(2)]
 - ORGANIZATION-TYPE Identifier [data type INTEGER is recommended]
 - ORGANIZATION-TYPE Arm Code [data type varchar(2); the externally defined ARM-CODE entity should be deleted]
 - ORGANIZATION-TYPE Arm Qualifier Code [data type varchar(2)]
 - ORGANIZATION-TYPE Echelon Code [data type varchar(2); the externally defined ECHELON entity should be deleted]
 - ORGANIZATION-TYPE Function Code [data type varchar(2)]
 - ORGANIZATION-TYPE Name [data type varchar (50), defined as in Army CADM]
 - ORGANIZATION-TYPE Role Code [data type varchar(2), in Army CADM]
 - ORGANIZATION-TYPE Service Code [data type varchar(2); the externally defined SERVICE entity should be deleted]
 - ORGANIZATION-TYPE Abbreviated Name [data type varchar(24)] (new)
 - ORGANIZATION-TYPE Alternate Identifier [data type varchar(50)] (used to store the previous JCAPS C2E Identifier where applicable)

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- ORGANIZATION-TYPE Description Text (new)
 - ORGANIZATION-TYPE Alternate Identifier Source Name (e.g., JCAPS).
 - c. Import "approved" ORGANIZATION-TYPE instances from the US Army C4RDP tables for:
 - Operational Facility (set ORGANIZATION-TYPE Role Code = 1)
 - Operational Element (set ORGANIZATION-TYPE Role Code = 2)
 - Command Post (set ORGANIZATION-TYPE Role Code = 3)
 - Command Post Cell (set ORGANIZATION-TYPE Role Code = 4).
 - d. Import ORGANIZATION-TYPE instances from Joint Staff J8 JOPES table for UNIT-TYPE (set ORGANIZATION-TYPE Role Code = 5).
3. Use the CADM entity ORGANIZATION-ASSOCIATION together with the two identifying relationships from ORGANIZATION: "is ordinate of" and "is subordinate to" and record all known hierarchical relationships among pairs of instances of ORGANIZATION in ORGANIZATION-ASSOCIATION.
 - a. Capture from early JCAPS implementation all occurrences of "ORGANIZATION owns C2E/OPFAC" by instances of ORGANIZATION-ASSOCIATION with ORGANIZATION-ASSOCIATION Reason Code = "2"—Controls (a new value "owns" for the Reason Code may be required).
 - b. Store instances of parent/child ORGANIZATION relationships as instances of ORGANIZATION-ASSOCIATION. Some of these may be stored in RELATIONSHIP-ASN in JCAPS 2.1.
 - c. Use a non-identifying, nulls-allowed relationship from ARCHITECTURE to ORGANIZATION-ASSOCIATION for the case of instances of ORGANIZATION-ASSOCIATION that are unique to an ARCHITECTURE.
 4. Consider basing the Command Relationships Chart (CRC) on instances of ORGANIZATION-ASSOCIATION; alternatively, consider basing the CRC on instances of NODE whose NODE Category Code = "O"—Organization.
 5. Allow both ORGANIZATION and ORGANIZATION-TYPE to be cited for the Operational Node Connectivity Diagram (ONCD) by use of NODE for NODE Category Code = "O" for ORGANIZATION (one but not both the ORGANIZATION Id and ORGANIZATION-TYPE Id in NODE being null).
 6. Allow both ORGANIZATION and ORGANIZATION-TYPE to be cited for an INFO-EXCH-REQ. This supported by explicit relationships from ORGANIZATION and ORGANIZATION-TYPE to INFO-EXCH-REQ or implicitly by a relationship from NODE whose NODE Category Code = "O" for Organization. At a minimum, an ORGANIZATION-TYPE is needed for source and destination if the ORGANIZATION Ids are null. Thus, ORGANIZATION-TYPE should be mandatory for source or destination unless an ORGANIZATION is cited for this role.
 7. In the Logical JCAPS data model (if not the physical schema) make use of all three subtypes of INTEROPERABILITY-REQUIREMENT (formerly named REQUIREMENT):

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- a. EXCHANGE-NEED-LINE-REQUIREMENT
 - b. INFORMATION-REQUIREMENT (formerly INFORMATION-EXCHANGE-REQUIREMENT in CADM 2.0) with the qualitative and quantitative requirements now found in JCAPS Information-Element table)
 - c. INFO-EXCH-REQ (formerly EXCH-NEED-LINE-IER in CADM 2.0) with the attributes specified in the CADM.
8. Expand the attributes of IER to include some (if not all) those from CADM, especially those noted as immediately required for NETWARS (see Annex H):
 - a. Exchange Relationship Type Code [corresponding to Unit Relationship (UR) code in NETWARS]
 - b. Frequency Rate (number per period) and an associated Time Period Quantity (e.g., in hours)
 - c. Perishability Code
 - d. Precedence Code
 - e. Timeliness Code.
 9. Separate or otherwise distinguish (at the logical model level at least) the “information flow” (specified as instance of INFORMATION-ELEMENT in the CADM) from those of the INFORMATION-REQUIREMENT. Use the non-identifying, no-nulls-allowed relationships from INFORMATION-ELEMENT to INFORMATION-REQUIREMENT that specifies content of what is to be exchanged.
 10. Note that the relationship of CADM 2.0 from EXCHANGE-NEED-LINE-REQUIREMENT to INFO-EXCH-REQ is now non-identifying (identifying in CADM 2.0) and the other from INFORMATION-REQUIREMENT to INFO-EXCH-REQ is now non-identifying (also identifying in CADM 2.0).
 11. Store the instances of SYSTEM-CATEGORY in JCAPS in the CADM entity SYSTEM-TYPE and relate one instance of SYSTEM-TYPE to another in SYSTEM-TYPE-ASSOCIATION.
 12. Store the instances of SYSTEM-TYPE in JCAPS in the CADM entity SYSTEM and relate one instance of SYSTEM to another in SYSTEM-ASSOCIATION.
 13. Store the instances of SYSTEM in JCAPS in the CADM entity NODE-SYSTEM and store the instances of SYSTEM-ASSOCIATION in JCAPS in the new entity NODE-SYSTEM-ASSOCIATION.
 - a. Note that JCAPS 2.1 implicitly serves as a NODE-SYSTEM because every instance of SYSTEM in JCAPS 2.1 must be assigned a unique value of C2E Identifier that states “where” the system instance is located (or “to which” the system instance is assigned).
 - b. Add a note to the entity definition to state that NODE-SYSTEM (formerly SYSTEM in Prototype 2.1) represents a unique instance of SYSTEM located at a specific NODE, capable of carrying a specific serial number or other globally unique

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identifier (e.g., an identifier taken from an instance of MATERIEL), not just a model number, version, or release of a SYSTEM. Thus, NODE-SYSTEM is used to populate specific instances of SYSTEM for an architecture and to (where appropriate) assign such specific instances to an ORGANIZATION or ORGANIZATION-TYPE.

- c. Augment the domain values for NODE-SYSTEM Role Code, if necessary, to express this specific association (use) of NODE to represent a SYSTEM instance.
- d. This modification of JCAPS could preclude the current procedure in JCAPS 2.1 to replicate instances of SYSTEM and thereby replicating all the characteristics of SYSTEM each time.
- e. Note that NODE-SYSTEM now has many of the JCAPS attributes defined for the JCAPS SYSTEM.

14. Introduce TASK from CADM/DoD Data Model

- a. Define subtypes or "Z" children of TASK to capture the elements of standardized tasks lists to include the following:¹¹
 - Mission Essential Task (elements of a mission essential task list or METL)
 - Universal Joint Task (elements of the Universal Joint Task List or UJTL)
 - Service extensions to the tactical (TA) tasks in the UJTL (e.g., an Army Tactical Task or ATA, a Navy Tactical Task or NTA)
 - Other hierarchically or unrelated TASKs.
- b. Expand the current capability in JCAPS Prototype 2.0 to cite a element of the UJTL when creating a PROCESS-ACTIVITY to the enhanced capability to cite any instance of TASK by use of the associative entity PROCESS-ACTIVITY-TASK.

15. Make use of NETWORK, NODE-ASSOCIATION, NODE-LINK, NETWORK-NODE, and NODE-ASSOCIATION-NETWORK from the CADM to describe network-related concepts including participating of nodes and links in networks, specialized roles of nodes in networks, and use of NODE to represent an entire network or even a network of networks.

16. Introduce INFORMATION-ELEMENT-ASSOCIATION to permit aggregation and disaggregation of INFORMATION-ELEMENTs, which are sometimes populated from the information flows in an activity model (OV-5), as well as a data flow diagram or other functional description (SV-4). Note: The same CADM entities are used to specify SV-4 as for OV-5, except for the addition of DATA-STORE and SYSTEM-FUNCTION as subtypes of PROCESS-ACTIVITY. Thus, both these products could be introduced together in JCAPS.

17. Clarify the current JCAPS Implementation Physical Schema by the following:

¹¹ At present, these are all stored as instances of TASK without subtypes because there are no attributes for any of the possible subtypes that are not already attributes of TASK.

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- a. Remove dual (doubly redundant) relationships (often one of the two relationships is named and the other is not).
- b. Make ARCHITECTURE Identifier an explicit owned attribute of ARCHITECTURE (this attribute is missing from the logical view and only migrates to ARCHITECTURE in the physical view through a relationship from PROCESS-ACTIVITY).
- c. Put Architecture Identifier (FK) in NODE, NETWORK, and other entities whose instances belong (only) to a specific ARCHITECTURE. This would require changes to the CADM when fully understood.
- d. Make use of documented values of codes to be actually stored in the tables. These values need not be shown to users.

4. Recommendations for Domain Values

The proposed data model has actual values of codes that are intended to be stored in the tables containing coded attributes. Where feasible, the datatype for coded attributes has been chosen to be smallint, which is unambiguous, expandable, and efficient for table lookups.

Many of the attributes taken from JCAPS 2.1 for the proposed JCAPS View of the CADM do not have clear specification of what codes are to be used (and then what those codes are to mean). Table 15 documents an assessment of the JCAPS Integrated Data Dictionary (IDD) [Ref. JCAPS 1999c] (prepared by the JCAPS Program Manager to supplement the JCAPS System User Guide [Ref. JCAPS 1999a] prepared by the JCAPS implementation team) to obtain values for coded domains.

Additionally, the Joint Staff's *Manual for Employing Joint Tactical Communications, Joint Technical Control Procedures and Systems* [Ref. CJCSM 6231.06 1995] was reviewed and the domain values shown in Table 16 were derived.

However, a large number of undefined domains remain and will need to be provided in order to enable the proposed JCAPS View of the CADM to become an implementable specification. The attributes derived from JCAPS with missing domain values are listed in Table 17.

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Table 15. Domain Values Derived from JCAPS Integrated Data Dictionary

Proposed Attribute Name	Prop. Datatype	Definition	JCAPS Attr. Name	Domain Derived from JCAPS IDD
ARCHITECTURE Status Code {JCAPS}	smallint	THE CURRENT STATUS OF THE ARCHITECTURE	STATUS	1 = Under Development; 2 = Draft; 3 = Complete; 4 = Under Analysis; 8--Not specified; 9--Not known.
COMMUNICATIO N-LINK-TYPE Code {JCAPS}	smallint	THE CODE GIVEN TO THE COMMUNICATION LINK	COMM_LN K_TY_CD	1 = SHF Satellite (S); 2 = C Band Satellite (B); 3 = Ku Band Satellite (K); 4 = UHF Satellite (A); 5 = TROPO (T); 6 = Microwave (UHF/SHF) (M); 7 = High Frequency (HF) Radio (H); 8 = Low Frequency (L) Radio; 9 = UHF Radio (U); 10 = VHF Radio (V); 11 = Cable (26 pair) (C); 12 = Cable (COAX) (P); 13 = Cable (Fiber Optic) (O); 14 = Cable (Other) (Z); 15 = Cascaded (W). Source: JCAPS IDD.
INTERFACE-TYPE Year 2000 Compliance Level Code {JCAPS}	smallint	THE CODE WHICH REPRESENTS THE LEVEL OF Y2K COMPLIANCE THIS INTERFACE MEETS.	Y2K_COM P_LVL_CD	1 = Level 0 - Retired; 2 = Level 1a - Indep. testing - Full capability; 3 = Level 1b - Indep. testing - Partial dual year capability; 4 = Level 1c - Indep. testing - Partial single year capability; 5 = Level 2a - Indep. audit of testing - Full capability; 6 = Level 2b - Indep. audit of testing - Partial dual year capability; 7 = Level 2c - Indep. audit of testing - Partial single year capability; 8 = Level 3a - Self-certification - Full capability; 9 = Level 3b - Self-certification - Partial dual year capability; 10 = Level 3c - Self-certification - Partial single year capability; 11 = Level 4 - Non-compliance; 98 = Not specified; 99 = Not known. Source: JCAPS IDD.
NODE User Code {JCAPS}	char(1)	The code that represents a specific user for a specific NODE.	USER_CO DE	A = JTF; B = NAVFOR; C = Army Corps Main; D = Army Corps Forward; E = Army Division; F = Marine Combat Service Support Element; G = TACC; H = CRC; I = Spare; J = AFFOR; K = CRP; L = Marine Air Component; M = FTR Wing Operations Center; N = Spare; O = Spare; P = Marine Ground Component CDR; Q = TAOC; R = DCS--Central Crea; S = TACC/TADC; T = DISA; U = ARFOR; V = Spare; W = Spare; X = Spare; Y = JSOTF; Z = MARFOR; 1 = ARSOF; 2 = AFSOF; 3 = NAVSOF; 4 = COSCOM; 5 = Spare; 6 = Spare; 7 = Spare; 8 = Spare. Source: JCAPS IDD.
NODE-SYSTEM Classification Code {JCAPS}	smallint	THE CODE THAT DENOTES THE LEVEL OF SECURITY CLASSIFICATION OF A SYSTEM.	SYS_CLS_CD	1 = Confidential (C); 2 = For Official Use Only (FOUO); 3 = Secret (S); 4 = Sensitive But Unclassified (SBU); 5 = Sensitive Compartmented Information (SCI); 6 = Top Secret (TS); 7 = Top Secret/Sensitive Compartmented Information (TS/SCI); 8 = Unclassified (U). Source: JCAPS IDD.
NODE-SYSTEM Information Assurance Text {JCAPS}	varchar(50)	The text that characterizes the way in which the NODE-SYSTEM ensures that its data is protected from access to or change by an unauthorized source.	SY_INFO_ASSURE	If coded, domain values might be the following: 1 = Administrative; 2 = Mission Critical; 3 = Mission Support; 8 = Not specified; 9 = Not known. Source: JCAPS IDD.
NODE-SYSTEM Services Provided Text {JCAPS}	varchar(50)	The text that characterizes the primary technical services other than security available to the NODE-SYSTEM.	SY_SRV_PROVIDED	Text may include one or more of the following: Data, Distance Learning, Imaging, Messaging, Other, Simulation, Video, Voice. Source: JCAPS IDD.
NODE-SYSTEM Status Code {JCAPS}	smallint	THE CODE THAT DENOTES THE CURRENT STATUS OF A SYSTEM.	SY_STAT_CD	1 = Operational; 2 = Under Test; 3 = Under Development; 4 = Planned; 5 = Proposed; 6 = Other; 8 = Not specified; 9 = Not known. Source: JCAPS IDD.

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Table 15. (Cont'd)

Proposed Attribute Name	Prop. Datatype	Definition	JCAPS Attr. Name	Domain Derived from JCAPS IDD
NODE-SYSTEM Supplementary Services Provided Text {JCAPS}	varchar(50)	The text that characterizes the secondary technical services other than security available to the NODE-SYSTEM.	SY_SUP_SRV_PROVIDED	Text may include one or more of the following: 24X7 (24 hours per day, 7 days per week), 5X8 (5 days per week, 8 hours per day), On-Site Technician, On-Call Technician, Other (Include in Remarks) . Source: JCAPS IDD.
NODE-SYSTEM-ASSOCIATION Interoperability Level Code {JCAPS}	smallint	THE CODE THAT DESIGNATES THE APPLICABLE KIND OF INTEROPERABILITY BETWEEN TWO NODE-SYSTEMS.	SY_ASN_IN_TROP_LVL_CD	1 = Level 0 - Retired; 2 = Level 1a - Indep. testing - Full capability; 3 = Level 1b - Indep. testing - Partial dual year capability; 4 = Level 1c - Indep. testing - Partial single year capability; 5 = Level 2a - Indep. audit of testing - Full capability; 6 = Level 2b - Indep. audit of testing - Partial dual year capability; 7 = Level 2c - Indep. audit of testing - Partial single year capability; 8 = Level 3a - Self-certification - Full capability; 9 = Level 3b - Self-certification - Partial dual year capability; 10 = Level 3c - Self-certification - Partial single year capability; 11 = Level 4 - Non-compliance; 98 = Not specified; 99 = Not known. Source: JCAPS IDD.
NODE-SYSTEM-ASSOCIATION Type Code {JCAPS}	smallint	THE CODE THAT DENOTES THE KIND OF NODE-SYSTEM-ASSOCIATION.	SY_ASN_TY_CD	1--Is a revision of; 2--Is an upgrade planned for; 3-- Migrates from; 4--Replaces; 5--Is installed in, 6-- Interfaces with; 7--Is a client for; 8--Is a server for; 9--Is an operating system for; 10--Provides office automation for, 11--Is a subsystem of; 12--Is a component of; 13-- Ordinate is initiator and subordinate is receptor in; 98-- Not specified; 99--Not known (added for CADM 2.0 Note: The Ordinate SYSTEM is the "target" system (the end result Domain source: Army CADM Domain values for SYSTEM-ASSOCIATION Type Code.
NODE-SYSTEM-COST-MANAGEMENT Type Code	smallint	THE TYPE OF NODE-SYSTEM-COST-MANAGEMENT DATA.	CM_TYPE	1 = Direct; 2 = Defense Working Capital Fund (DWCF); 8 = Not specified; 9 = Not known. Source: JCAPS IDD.
NODE-SYSTEM-TRANSMISSION Antenna Type Name {JCAPS}	varchar(50)	The name of the class of antenna primary used by a specific NODE-SYSTEM for data communications.	ANTN_TY_NM	If coded, domain values might be the following: 1 = Collinear Array; 2 = Conical; 3 = Conifan; 4 = Dipole; 5 = Discone; 6 = Helical; 7 = Horn; 8 = Inverted L; 9 = Log Periodic; 10 = Loop; 11 = Monopole; 12 = Other; 13 = Parabolic; 14 = Phased Array; 15 = Reflector Array; 16 = Rhombic; 17 = Sloping Long Wire; 18 = Sloping V; 19 = Slotted Waveguide; 20 = Spiral; 21 = Umbrella; 22 = Unknown; 23 = Whip; 24 = Yagi; 98 = Not Specified; 99 = Not Known. Source: JCAPS IDD.
NODE-SYSTEM-TRANSMISSION Communication Mode Code {JCAPS}	smallint	The code that represents the class of data communications used by a specific NODE-SYSTEM.	COMM_MODE	1 = Burst; 2 = Full Duplex; 3 = Half Duplex; 4 = Not Applicable; 5 = Other; 6 = Selectable; 7 = Simplex; 8 = Not specified; 9 = Not known. Source: JCAPS IDD.
NODE-SYSTEM-TRANSMISSION Receive Frequency Display Unit Code {JCAPS}	smallint	The code that represents the units of measure adopted for user displays of the frequency that is employed for incoming traffic in data communications for a specific NODE-SYSTEM.	RX_FREQ_DISP_UNITS	1 = Hz; 2 = kHz; 3 = MHz; 4 = GHz; 8 = Not specified; 9 = Not known.

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Table 15. (Cont'd)

Proposed Attribute Name	Prop. Datatype	Definition	JCAPS Attr. Name	Domain Derived from JCAPS IDD
NODE-SYSTEM-TRANSMISSION Transmit Frequency Display Unit Code {JCAPS}	smallint	The code that represents the units of measure adopted for user displays of the frequency that is employed for outgoing traffic in data communications for a specific NODE-SYSTEM.	TX_FREQ_DISP_UNITS	1 = Hz; 2 = kHz; 3 = MHz; 4 = GHz; 8 = Not specified; 9 = Not known.
SOFTWARE-ITEM Category Code	smallint	The code that denotes the class of a SOFTWARE-ITEM. It serves as a discriminator for subtypes of SOFTWARE-ITEM.	SW_IT_CAT_CD	CADM domain: 1--Application Software; 2--Communication Software; 3--Data Encryption Software; 4--System Software; 5--Security Software; 8--Not specified; 9--Not known. Added for JCAPS: 10 = Operating System; 11 = Operating Environment. Source: JCAPS IDD.
SOFTWARE-ITEM DII COE Compliance Code {JCAPS}	smallint	THE CODE THAT DENOTES WHETHER OR NOT THE CURRENT VERSION OF A SOFTWARE-ITEM COMPLIES WITH THE DII COE.	SW_IT_DII_COE_CD	Values are 0, 1, 2, 3, 4, 5, 6, 7, and 8 from Defense Information Infrastructure Common Operating Environment (DII COE) compliance codes.
SOFTWARE-ITEM Year 2000 Compliance Level Code {JCAPS}	smallint	The code that represents the degree to which the SOFTWARE-ITEM conforms to stated guidance on handling dates in multiple centuries.	SW_IT_Y2K_COMP_LVL_CD	1 = Level 0 - Retired; 2 = Level 1a - Indep. testing - Full capability; 3 = Level 1b - Indep. testing - Partial dual year capability; 4 = Level 1c - Indep. testing - Partial single year capability; 5 = Level 2a - Indep. audit of testing - Full capability; 6 = Level 2b - Indep. audit of testing - Partial dual year capability; 7 = Level 2c - Indep. audit of testing - Partial single year capability; 8 = Level 3a - Self-certification - Full capability; 9 = Level 3b - Self-certification - Partial dual year capability; 10 = Level 3c - Self-certification - Partial single year capability; 11 = Level 4 - Non-compliance; 98 = Not specified; 99 = Not known. Source: JCAPS IDD.
SYSTEM Year 2000 Compliance Level Code {JCAPS}	smallint	THE CODE WHICH REPRESENTS THE LEVEL OF Y2K COMPLIANCE THIS SYSTEM MEETS.	Domain is TBD from JCAPS. Source: Y2K_COMP_LVL_CD	1 = Level 0 - Retired; 2 = Level 1a - Indep. testing - Full capability; 3 = Level 1b - Indep. testing - Partial dual year capability; 4 = Level 1c - Indep. testing - Partial single year capability; 5 = Level 2a - Indep. audit of testing - Full capability; 6 = Level 2b - Indep. audit of testing - Partial dual year capability; 7 = Level 2c - Indep. audit of testing - Partial single year capability; 8 = Level 3a - Self-certification - Full capability; 9 = Level 3b - Self-certification - Partial dual year capability; 10 = Level 3c - Self-certification - Partial single year capability; 11 = Level 4 - Non-compliance; 98 = Not specified; 99 = Not known. Source: JCAPS IDD.
SYSTEM-TRANSMISSION Receive Frequency Maximum Display Unit Code {JCAPS}	smallint	The code that represents the units of measure adopted for user displays of the highest frequency that is employed for incoming traffic in data communications for a specific SYSTEM.	RX_FREQ_HIGH_DISP_UNITS	1 = Hz; 2 = kHz; 3 = MHz; 4 = GHz; 8 = Not specified; 9 = Not known.

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Table 15. (Cont'd)

Proposed Attribute Name	Prop. Datatype	Definition	JCAPS Attr. Name	Domain Derived from JCAPS IDD
SYSTEM-TRANSMISSION Receive Frequency Minimum Display Unit Code {JCAPS}	smallint	The code that represents the units of measure adopted for user displays of the lowest frequency that is employed for incoming traffic in data communications for a specific SYSTEM.	RX_FREQ_LOW_DISP_UNITS	1 = Hz; 2 = kHz; 3 = MHz; 4 = GHz; 8 = Not specified; 9 = Not known.
SYSTEM-TRANSMISSION Transmit Frequency Maximum Display Unit Code {JCAPS}	smallint	The code that represents the units of measure adopted for user displays of the highest frequency that is employed for outgoing traffic in data communications for a specific SYSTEM.	TX_FREQ_HIGH_DISP_UNITS	1 = Hz; 2 = kHz; 3 = MHz; 4 = GHz; 8 = Not specified; 9 = Not known.
SYSTEM-TRANSMISSION Transmit Frequency Minimum Display Unit Code {JCAPS}	smallint	The code that represents the units of measure adopted for user displays of the lowest frequency that is employed for outgoing traffic in data communications for a specific SYSTEM.	TX_FREQ_LOW_DISP_UNITS	1 = Hz; 2 = kHz; 3 = MHz; 4 = GHz; 8 = Not specified; 9 = Not known.
SYSTEM-TYPE-ASSOCIATION Role Code {JCAPS}	smallint	The code that represents the way in which the Parent SYSTEM-TYPE is related to the Child SYSTEM-TYPE.	Source: based on SYS_CAT_PARENT_ID, SYS_CAT_D_TXT	1 = Is a superclass for; 2 = Is equivalent to; 8 = Not specified; 9 = Not known.

Table 16. Domain Values Provided by JCAPS Program Manager

Proposed Attribute Name	Prop. Datatype	JCAPS Definition	JCAPS Attr. Name	Domain Provided by JCAPS Program Manager
COMMUNICATION-LINK System Link Designator Identifier {JCAPS}	varchar(8)	The identifier that contains the System Link Designator (SLD) assigned to a specific COMMUNICATION-LINK.	SLD	The System Link Designator is a 6-character identifier whose first character is from a list of System/Link types; the second character is the "from" NODE User Code; the third character is the "to" NODE User Code; the fourth and fifth characters are the number (01-99) of trunk groups or system number; and the sixth through eighth characters are the number (001-999) of channels per group or system. The System/Link types are the following: S = SHF Satellite; B = C Band Satellite; K = Ku Band Satellite; A = UHF Satellite; T = TROPO; M = Microwave (UHF/SHF); H = High Frequency (HF) Radio; L = Low Frequency (LF) Radio; U = UHF Radio; V = VHF Radio; C = Cable (26 pair); P = Cable (COAX); O = Cable (Fiber Optic); Z = Cable (Other); W = Cascaded. Sources: CJCSM 6231.06 (14 Aug 95); JCAPS PM (Nov 99); and JCAPS 2.1 (SLD).
COMMUNICATION-CIRCUIT-TYPE CCSD Agency Code {JCAPS}	char(1)	The code, specified as part of the Command Communications Service Designator, that denotes the class of organization providing the service.	CCSD_AGENCY_CODE	A = Department of State; B = Department of Navy or US Navy; C = Joint Staff; D = Defense Information System Agency; E = Joint Tactical Force Headquarters; F = NCS-Minor Operating Agencies, e.g., DOE; G = General Services Administration; H = Diplomatic Telecommunications System; I = Allied Governments; J = Department of the Air Force; K = Technical Research Institute; L = (FAA) Federal Aviation Administration; M = (NASA) National Aeronautics and Space Administration; N = (DOD) DOD Agencies not listed; O = (FORGN) Host Country; P = (NCS) Other US Departments; Q = (FEMA) Federal Emergency Management Agency; R = USCINCPAC; S = OSD; T = (FORGN) Treaty Organization; U = Army or US Army; V = USCINCENT; W = USCINACOM; X = (DOC) Department of Commerce; Y = Joint Special Operations Task Forces HQ (JSOTF); Z = MARFOR; 1 = ARSOF; 2 = AFSOF; 3 = NAVSOF; 4 = Tactical Support Command, i.e., COSCOM; 5 = (TCA) TELRAN Communications Analysis; 6 = CDRFORSCOM; 7 = USCINCSOC; 8 = USCINCSO; 9 = USCINCEUR; 0 = Spare (CINC assigned). Sources: CJCSM 6231.06 (14 Aug 95); JCAPS PM (Nov 99); and JCAPS 2.1 (CCSD_AGENCY_CODE).
COMMUNICATION-CIRCUIT-TYPE CCSD Purpose Use Code {JCAPS}	char(2)	The code, specified as part of the Command Communications Service Designator,	CCSD_PURPOSE_CODE	AK = Air Force Remote Computer Circuits; B1 = Track Supervision Net; B2 = Interface Coordination Net; B3 = Data Coordination Net; B4 = Voice Product Net; CA = TAC Air Defense Network; C6 = Computer-Assisted Force Management System; CM = Communications Management; EA = Air Force Security Service; EU = USEUCOM-EMC USEUCOM Contingency Circuits; EX = Exercise Circuits (For temporary circuits only); F1 = Intercenter Air Traffic Movement and Control - Overseas; F2 = Air

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Table 16. (Cont'd)

Proposed Attribute Name	Prop. Data-type	JCAPS Definition	JCAPS Attr. Name	Domain Provided by JCAPS Program Manager
COMMUNICATION-CIRCUIT-TYPE CCSD Purpose Use Code {JCAPS} (Cont'd)		that denotes the purpose for the service provided.		Traffic Movement and Control Interceptor Radar Handoff; F3 = Air Traffic Movement and Control Intra-Area Nonradar; F4 = Air Traffic Movement and Control Intra-Area Radar Handoff; F5 = Air Traffic Movement and Control Tower to Tower; F7 = Air Traffic Movement and Control Intercenter Nonradar; G2 = Weather Message System Center High-Speed Data Circuits; G5 = Service from WMSC to Military Station of Weather Info; G7 = Service Collect and Disseminate Nonaviation Weather Info; HE = USCENAF Command and Control Communications; JF = Defense Meteorological Satellite Program; JN = Joint Interface Test Force--Joint Interoperability Tech CMD/Ctrl System; J1 = Local Teletype Circuits; J6 = National Weather Service Radar FAX; KA = Intelligence; KK = Army Command and Control Network; KL = Keying Lines; KN = NEACP Teletypewriter Network; KW = NCA/CJCS Minimum Essential Emergency Communications Network; KX = NMCC Teletypewriter Network; KZ = NMCS Data Transmission; K6 = Miscellaneous Remote Facility Circuits; LL = Long Local Subscriber; LP = DSN Loop-Around Trunks; MC = US Marine Corps; MV = US Military Assistance Network; NB = USCENCOM Command and Control Circuits; NG = National Guard--Training; OL = Link Orderwire; OM = Telemetry Orderwire; ON = Non-DCS Orderwire; OO = System Orderwire; OR = Teletype Orderwire; PA = AF Command Post Voice Network; PB = AF Alternate Command Network; PC = AF Command Network; PH = Army, Air Force, Navy Network; QD = Weather Activities--Miscellaneous; QE = Weather Teletype (Civil FAA,C,O); QG = Weather Teletype; QI = Weather FAX (Civil, US Weather Bureau); QJ = Weather FAX; QK = Lazer FAX Weather (LAZERFAX); QL = Tactical Imagery Dissemination System (TIDS); QT = Tactical Analog Interswitch Trunk (TASIT) 1/Non-DCS; QU = Tactical Digital Interswitch Trunk (TDIST) 1/Non-DCS; QV = Tactical Weather Switch Interswitch Trunk (TMIST) 1/Non-DCS; RF = PACAF Command and Control Network; RN = Foreign Circuits Between US Components; RO = Foreign Circuits Between Non-US Components; RR = Foreign Circuits Between Non-US Components and US Components; ST = STU III Intercountry Connectivity; S3 = Intelligence and Security Automated Network; TA = TAC Operations Support TTY Network; TB = TAC Command and Control Voice Alerting System; TC = TAC Operations Support Voice System Network; TD = TAC Remote Computer Circuits; TE = Army, AF, Navy Temp (See DCAC 310-65-1, Chapter 14); TF = Department of State; TJ = CRITICOM Red TDM Package System; TK = CRITICOM Black TDM Package System; TM = DCS AN/FCC-100 Pkg Sys (DTN Only) (Code for Other FCC-100 Trunks); TN = DCS Time Division Multiplex Package System; TO = Telemetry/Orderwire Package System Trunk; TP = Speech Plus System; TQ = Frequency Subdivided Multiple Modem System (Digital); TW = Voice Channel Package system; TX = VFCT System; T2 = Non-DCS AN/FCC-100 Pkg System (For Use with Type Service M); T4 = Non-DCS TDM Pkg System (For Use with Type Service Code "M" / "X"); T5 = Non-DCS Statistical TDM Pkg System (Use with Type Svc Code "M"); T6 = Tactical Digital Information Link (TADIL); T7 = Tactical Voice Information Link (VOX TELL); UA = Common-User Teletypewriter Service; UB = Common-User Voice Service; UC = Trunk Circuit Between Voice Concentrator System Equipment; UD = DCS Secure Voice Communications Network; UE = Common-User Digital Data; UF = Common-user FAX (Other than weather); UG = Electronic Blackboard Communications; UJ = DDN Dial-up Service (DCO to TAC); UK = DDN Gateway Access Line; UL = DCS Automatic Record Communications Network Circuits; UM = Special Purpose Network (See DCAC 310-65-1 Chap 14); UN = DDN IMP to IMP Interswitch Trunk Circuit; UO = AF Air Operations Network; UD = TAC to IMP DDN Access Line; UR = Nonsecure Network Ckts (e.g., STU-III) Which are Part of the DCS; US = DSN Nontandem IST FM DSN END OFC Switch to DSN Remote Switch; UT = DSN ISW Line FM DSM Node SW to Non-DCS (SVC/AGCY) SW; UU = DSN IST Ckt connecting DSN Node Switches; UV = DSN Nontandem IST FM DSN END OFC Switch to DSN End Ofc Switch;

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Table 16. (Cont'd)

Proposed Attribute Name	Prop. Data-type	JCAPS Definition	JCAPS Attr. Name	Domain Provided by JCAPS Program Manager
COMMUNICATION-CIRCUIT-TYPE CCSD Purpose Use Code {JCAPS} (Cont'd)				<p>UW = Interdepartmental Dial Telephone Network; UX = Non-Tandem IST DSN Node/Switch to DSN End Ofc/Remote SW; UY = DSN Dial Subscriber; UZ = Tandem Switch Intersite Trunk Circuit; VC = Trunk Circuit Between Voice Concentrator System Equipment; VQ = Mystic Star Network (JACC/CP); WC = WWMCCS (WIN) Intercomputer Circuit (Approved by Joint Staff/J2); WD = WWMCCS (WIN) Access Line (Approved by Joint Staff/J2-32); WE = Comm SVC Not Associated with Circuit Lease (See DCAC 310-65-1); WF = WASHFAX High-Speed Digital Facsimile; WG = WWMCCS (WIN) Combination Access Line (Approved by Joint Staff/J-32); WJ = WWMCCS Access Line (Approved by Joint Staff/J-32); WK = IDHS Access Line (approved by Joint Staff/K-32); WX = Navy Weather; XD = NWS Digital Facsimile Network (DIFAX); XQ = GOES, Telephone Facsimile System (GOESFAX); XZ = NWS Miscellaneous Weather Communications System; YA = Fleet Ship-Shore Access; YB = Alaska Command and Control; YC = USACOM Command and Control Network; YD = USSOUTHCOM command and Control Network; ZA = Satellite Control/Reporting Communications; ZB = Tactical Command and Control; ZD = Search and Rescue; ZH = Army Air Defense Command Intersite Communications; ZK = Ground Forces Air Support Network; ZM = Military Air Traffic Control and Flight Facilities network; ZN = Intelligence Collection/Dissemination Network; ZS = Air Traffic Control/Flight Facilities; ZX = DSN Access Line Equip for Delivery or Record Traffic thru to DIN.. Sources: CJCSM 6231.06 (14 Aug 95); JCAPS PM (Nov 99); and JCAPS 2.1 (CCSD_PUR_USE_CODE).</p>
COMMUNICATION-CIRCUIT-TYPE CCSD Type Service Code {JCAPS}	char(1)	The code, specified as part of the Command Communications Service Designator, that denotes the kind of service provided.	CCSD_TYS_CODE	<p>A = Teletype Service Other Than DCS Switched Networks; B = DSN Access Line; C = DSN Interswitch Trunk; D = Data Other Than DCS Switched Networks; E = AUTODIN Access Line (See L, Q, and 7); F = AUTODIN Interswitch Trunk; J = Facsimile or Telephoto Other Than DCS Switched Networks; K = Continuous Wave; L = DSSCS AUTODIN Access Line; M = Package System. No Channel Accounting by DISA; N = TBD; P = Interswitch Trunk/Circuit for Switched Networks Other Than DSN or AUTODIN; Q = AUTODIN Interchange Circuits, Circuits Between AUTODIN and Other Switched Networks, except DSN; R = Alternate Voice/Record Other Than DCS Switched Networks; S = Video; T = Telemetry Other Than DCS Switched Networks; U = European Telephone System Access Line; V = Voice Other Than DCS Switched Networks; W = European Telephone System Interswitch Trunk; X = Package System, Channel Accounting by DISA; Y = Signaling, dc, or Audio, Other Than DCS Switched Networks; Z = Non-DCS Intersite Trunk Circuit; 1 = Automatic Message Processing System; 2 = AMPS Trunk between AMPS Switches; 3 = FTS Access Line; 4 = FTS Interswitch Trunk; 7 = Indirect AUTODIN Access through an Intermediate Relay; 8 = DDN Interswitch Trunk Circuit; 9 = DDN Access Line. Sources: CJCSM 6231.06 (14 Aug 95); JCAPS PM (Nov 99); and JCAPS 2.1 (CCSD_TYS_CODE).</p>

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Table 17. JCAPS-Based Attributes with No Known Domain

Proposed Attribute Name	Definition	JCAPS 2.1 Attr. Name
COMMUNICATION-CIRCUIT Status Code {JCAPS}	THE CODE THAT REPRESENTS THE STATE OF A COMMUNICATION-CIRCUIT. Source: JCAPS.	CC_STATU S_CODE
COMMUNICATION-CIRCUIT-TYPE Code {JCAPS}	THE CODE THAT DENOTES A CLASS OF COMMUNICATION-CIRCUIT-TYPE.	COM_CIR_ TY_CD
FUNCTIONAL-AREA Type Code {JCAPS}	THE CODE THAT REPRESENTS A KIND OF FUNCTIONAL-AREA.	FUNC_AR_ TY_CD
INTERFACE-TYPE Auto Code {JCAPS}	CODE USED BY JCAPS FOR AUTO ROUTING FOR THE INTERFACE-TYPE.	INTF_TY_A UTO_CD
NODE-SYSTEM Implementation Version Operational Status Code {JCAPS}	THE CODE THAT DENOTES THE OPERATIONAL STATUS OF A SPECIFIC VERSION OF A SPECIFIC IMPLEMENTATION OF A SYSTEM.	SY_IMP_V ER_OP_ST _CD
NODE-SYSTEM Legacy Migration System Code {JCAPS}	THE CODE THAT DENOTES WHETHER OR NOT THE SYSTEM IS A LEGACY SYSTEM TARGETED FOR MIGRATION.	SY_LEG_M IG_CD
NODE-SYSTEM Mobility Code {JCAPS}	THE CODE THAT DENOTES WHETHER OR NOT A SYSTEM IS MOBILE.	SY_MBL_C D
NODE-SYSTEM Transmission Classification Code {JCAPS}	The text that characterizes the highest level of security that applies to incoming and outgoing communications for a NODE-SYSTEM.	SY_XMT_C LS_CD
NODE-SYSTEM-ASSET-OWNERSHIP Type Code {JCAPS}	THE TYPE OF OWNERSHIP	AO_OWNE RSHIP
NODE-SYSTEM-ASSOCIATION Interface Type Code {JCAPS}	THE CODE THAT DESIGNATES THE CLASS OF INTEROPERATING RELATIONSHIP BETWEEN TWO SYSTEMS IN A SYSTEM-ASSOCIATION.	SY_INTF_T Y_CD
NODE-SYSTEM-ASSOCIATION Relationship Type Code {JCAPS}	The code that denotes the class of relationship between the Parent NODE-SYSTEM and the Child NODE-SYSTEM.	REL_TYPE
ORGANIZATION Unit Identification Code {JCAPS}	THE UNIT IDENTIFIER CODE OF THE ORGANIZATION	Source: UIC_CD
SOFTWARE-ITEM Build Status Code {JCAPS}	THE CODE THAT DENOTES THE STATUS OF A SOFTWARE-ITEM BUILD.	SW_IT_BL D_ST_CD
SOFTWARE-ITEM DMS Compliance Code {JCAPS}	THE CODE THAT DENOTES WHETHER OR NOT THE CURRENT VERSION OF A SOFTWARE-ITEM COMPLIES WITH THE DEFENSE MESSAGING SYSTEM.	SW_IT_DM S_CP_CD
SOFTWARE-ITEM Operational Status Code {JCAPS}	THE CODE THAT DENOTES THE OPERATIONAL STATUS OF THE CURRENT VERSION OF A SOFTWARE-ITEM.	SW_IT_OP ST_CD
SOFTWARE-ITEM Source Type Code {JCAPS}	THE CODE THAT REPRESENTS THE SOURCE OF A SOFTWARE-ITEM.	SW_IT_SR TY_CD
SOFTWARE-ITEM Type Code {JCAPS}	THE CODE THAT DENOTES A KIND OF SOFTWARE-ITEM.	SW_IT_TY _CD
SOFTWARE-ITEM Version Operational Status Code {JCAPS}	THE CODE THAT DENOTES THE OPERATIONAL STATUS OF A PARTICULAR VERSION OF A SOFTWARE-ITEM.	SW_IT_V_ OP_ST_CD
SYSTEM Status Code {JCAPS}	The code that represents the condition of this specific version of the SYSTEM.	Source: SY_TY_ST AT_CD
SYSTEM-FUNCTION Type Code {JCAPS}	THE CODE THAT DENOTES A KIND OF FUNCTION.	FUNC_TY_ CD
SYSTEM-TRANSMISSION Communication Mode Code {JCAPS}	The code that represents the class of data communications used by a specific SYSTEM.	COMM_MO DE
TASK Hierarchy Sequence Code {JCAPS}	The code that denotes the order of TASKs with the same Hierarchy Number Identifier.	UJTL_TAS K_HIER_S EQ_CD

5. Recommendations for Attribute Physical Details

Direct database-to-database exchange is facilitated if implementations can agree on many of the physical details included in a detailed database design. These include entity and attribute access names, attribute datatypes (including field length for strings), and null options. Recommendations for these details for the proposed JCAPS View of the CADM are depicted in

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the physical view shown at the end of Annex J, and they are provided as tables in Annex K for entities and in Annex M for attributes. The recommendations are summarized below.

a. Entity Access Names (Table Names)

The proposed data model provides (in Annexes J and K) a table name of 18 characters or less for every entity (Table 18). When these are common between exporting and importing databases, the importing process is greatly facilitated. Otherwise, a mapping must be created to transliterate the source and destination names to be used when doing direct database-to-database exchanges or importing a file from an external source.

In most cases, where a DoD standard access name was approved and available in the DoD Data Dictionary System (DDDS), the DoD standard access name for the entity was used for the table name. In other cases, a more meaningful table name or a table name using more consistent abbreviations (e.g., NTWK for NETWORK) was introduced.

Table 18. Table Names for Entities in Proposed JCAPS Data Model

Table Name	Table Name	Table Name	Table Name
AGREEMENT	IER	NODE_ASSOC	POINT
ARCH	IER_ASSURANCE	NODE_ASSOC_NTWK	POINT_OF_CONTACT
ARCH_AGR	IER_ELEMENT	NODE_ASSOC_REQ	PROC_ACTVTY
ARCH_ASSOC	IER_ELEMENT_METH	NODE_COMM_MEDIUM	PROC_ACTVTY_ASSOC
ARCH_DOC	IER_ELEMENT_PROD	NODE_DAT_ITM_TY	PROC_ACTVTY_TSK
ARCH_INTEROP_REQ	IF_CONTROL_DOC	NODE_HIERARCHY	REQ_INTEROP_CAPAB
ARCH_NODE	INF_REQ_DAT_ITM_TY	NODE_LINK	SCTY_ACCESS_CMPRT
ARCH_ORG	INFO_ELEM	NODE_LINK_CAP	SCTY_CLASS
ARCH_TASK	INFO_ELEM_ASSOC	NODE_LINK_COMM_MED	STD
BAS	INFO_EXCH_MATRX	NODE_MATERIEL	SW_ITEM
CAPABILITY	INFO_EXCH_MATRX_EL	NODE_MISSION_AREA	SW_ITEM_ASSOC
CAV_SCTY_CLASS	INFO_LINK	NODE_ORG	SYS
COMM_CHANNEL	INFO_REQ	NODE_ORG_TYPE	SYS_ARCH
COMM_CIR_TY	INTERFACE_IER_ASN	NODE_PROCESS_ACT	SYS_ASSOC
COMM_CRCT	INTEROP_REQ	NODE_SYS_ASSET_OWN	SYS_CAPABILITY
COMM_CRCT_IER_ASN	INTEROP_REQ_TASK	NODE_SYS_ASSOC	SYS_EQUIP_TYPE
COMM_LINK	INTF	NODE_SYS_COST_MAN	SYS_FUNC
COMM_LINK_IER_ASN	INTF_TY	NODE_SYS_SWI	SYS_IF_DESCR
COMM_LNK_TY	MAT_ASSOC	NODE_SYS_TRANSM	SYS_IF_DESCR_EL
COMM_MEDIUM	MAT_ITEM	NODE_SYSTEM	SYS_INTF_TY
COMM_SYS	MAT_ITEM_ASSOC	NODE_TASK	SYS_ORG
COMM_SYS_TRANSM	MAT_ITEM_COST	NODE_TREE	SYS_SEC_CLASS
COUNTRY	MATERIEL	NTWK	SYS_SOFTWARE_ITEM
DATA_ITEM	MATL_CAP_NORM	NTWK_ASSOC	SYS_SYS_MTRX
DATA_ITEM_TYPE	MEAS_ELEV_PT	NTWK_NODE	SYS_SYS_MTRX_EL
DOC	MSG_STD	NTWK_ORG	SYS_TRANSM
DOC_ASSOC	MSG_STD_IE_ICOM	OP_ARCH	SYS_TYPE
DOC_CAV_SCTY_CLASS	MSN	OP_MSN_THREAD	SYS_TYPE_ASSOC
EQUIP_TYPE	MSN_AR_FUNCT_AR	OP_MSN_THREAD_ELEM	TASK
EQUIP_TYPE_SW_ITEM	MSN_AR_PROC_ACTY	OP_SCENARIO	TASK_ASSOC
EXCH_NEED_LINE_REQ	MSN_AREA	ORG	TASK_MISSION_AREA
EXCH_REL_TY	MSN_ESS_TASK	ORG_ASSOC	TECH_ARCH
FUNCL_AREA	MSN_ESS_TASK_LST	ORG_LOC_PT	USER_DEF_PROP_DICT
GUID	MSN_ESS_TASK_LSTEL	ORG_TY	USER_DEF_PROP_ENUM
GUID_ASSOC	ND_TREE_NODE_HIER	ORG_TY_ASSOC	USER_DEF_PROPS
GUID_DOC	NODE	PERIOD	—

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b. Attribute Access Names (Column Names)

As for entities, a column name of 18 characters or less is specified in Annexes J and M for every attribute. Because of the length of logical attribute names, the shorter column name uses many two- and three-letter abbreviations to uniquely identify the attribute (under the guidance of DoD 8320 [DoD 8320 1995], attribute names are not only 18 characters or less but must be globally unique). The limited length gives room for only three to seven letters to be used for the entity portion of the attribute name (it is common practice for the entity portion of the column names to be identical for all the owned attributes of the same entity).

Table 19 provides some of the abbreviations commonly used in creating column names for CADM attributes. Inconsistent use of abbreviations arises because of the large number of proponents for DoD data standards (functional data administrators) and because they are created over a long period of time with changing staffs supporting the proponents. When column names are not proposed by the functional data administrator, the Defense Data Dictionary System (DDDS) creates one by leaving out vowels and appending meaningless counters.

Table 19. Abbreviations Used in Column Names

Abbreviation	Meaning	Abbreviation	Meaning
abbr	Abbreviation; Abbreviated	nm	Name
alt	Alternate	nr	Number
amt	Amount	ord	Ordinate
appr	Approval	purp	Purpose
assoc	Association	qy	Quantity
bgn	Begin	rec	Record
caldt	Calendar Date	req	Requirement
caldtm	Calendar Date-Time	rmk	Remark
cat	Category	rsecl	Record Security Classification
cd	Code	rsn	Reason
cgo	Cargo	rt	Rate
coord	Coordinate	Rx	Receive
descr	Description	secl	Security Classification
dm	Dimension	seq	Sequence
dt	Date	shrt	Short
dtm	Date-Time	src	Source
dur	duration	sta	Status
eff	Effective	sub	Subordinate
flg	Flag	tm	Time
freq	Frequency	tx	Text
grp	Group	Tx	Transmit
ht	Height	ty	Type
id	Identifier	un	Unit
Ind	Indicator	vers	Version
lvl	Level	vol	Volume

Table 20 provides a sample of column names (for the first 144 of the 667 owned-attributes) included with the proposed data model for JCAPS.

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Table 20. Example Column Names for Attributes in Proposed JCAPS Data Model

Table Name	Table Name	Table Name	Table Name
AGR_cat_cd	ARCTSK_leaf_ind_cd	COMM_LNK_TY_dat_rt	DIT_id
AGR_dur_ty_cd	BAS_appr_sta_cd	COMM_LNK_TY_dsc_tx	DOC_abbrev_title_nm
AGR_eff_dt	BAS_Cd	COMM_LNK_TY_id	DOC_apprvl_calcdt
AGR_expir_dt	BAS_DB_Obj_Nm	COMM_LNK_TY_nm	DOC_archprod_ty_cd
AGR_id	BAS_rec_secl_cd	COMM_MED_abbrev_nm	DOC_cat_cd
AGR_nm	CAP_descr_tx	COMM_MED_cat_cd	DOC_descr_tx
AGR_tx	CAP_id	COMM_MED_id	DOC_ID
AGR_ty_cd	CAP_meas_un_cd	COMM_MED_nm	DOC_nm
AGR_vers_id	CAP_nm	COMMCIPTY_abbrev_nm	DOC_notation_nm
ARCH_ASSOC_eff_dt	CAP_ty_cd	COMMCIPTY_CCSDA_cd	DOC_publishd_dt
ARCH_ASSOC_id	CL_IER_assoc_id	COMMCIPTY_CCSDP_cd	DOC_rmk_tx
ARCH_ASSOC_ty_cd	CNTRY_abbrev_nm	COMMCIPTY_CCSDT_cd	DOC_rng_cd
ARCH_cmpltm_dt	CNTRY_cd	COMMCIPTY_cd	DOC_smry_descr_tx
ARCH_descr_tx	CNTRY_nm	COMMCIPTY_data_rt	DOC_src_nm
ARCH_id	CNTRY_off_nm	COMMCIPTY_descr_tx	DOC_tm_frame_ty_cd
ARCH_INOPREQ_id	CNTRY_pstl_nm	COMMCIPTY_id	DOC_URL_tx
ARCH_INOPREQ_us_cd	CNTRY_scop_note_tx	COMMCIPTY_nm	DOC_ver_id
ARCH_nm	COMM_CH_id	COMMCRCTIER_asn_id	DOCA_id
ARCH_NODE_id	COMM_CH_nr_id	CS_alt_nm	DOCA_rns_cd
ARCH_NODE_role_cd	COMM_CRCT_CCSD_id	CS_rec_secl_cd	DOCA_role_cd
ARCH_objtv_tx	COMM_CRCT_da_tr_rt	CS_TRNS_rsecl_cd	ENLR_autom_prtty_cd
ARCH_ORG_dt	COMM_CRCT_descr_tx	CS_ty_cd	ENLR_avail_ind_cd
ARCH_ORG_id	COMM_CRCT_id	CSC_ABBR_TX	ENLR_cnstr_tx
ARCH_ORG_role_cd	COMM_CRCT_sta_cd	CSC_comp_shrt_nm	ENLR_crit_cd
ARCH_purp_cnstr_tx	COMM_LNK_alt_id	CSC_DESCR_TX	ENLR_descr_tx
ARCH_scp_tx	COMM_LNK_chnl_qy	CSC_ID	ENLR_freq_cntin_cd
ARCH_smry_descr_tx	COMM_LNK_COMSEC_tx	CSC_prprtry_flg_cd	ENLR_introp_lvl_cd
ARCH_sta_cd	COMM_LNK_descr_tx	CSC_restr_flg_cd	ENLR_timeliness_cd
ARCH_tm_frm_ty_cd	COMM_LNK_grp_tr_rt	CSC_RLS_CD	ENUM_VALUE
ARCH_vw_ty_cd	COMM_LNK_lat_tm	CSC_RLS_RSN_CD	EQT_SWI_role_cd
ARCHAGR_id	COMM_LNK_lim_ds_tx	CSC_SPHND_INSTR_CD	EQTY_alt_id
ARCHAGR_role_cd	COMM_LNK_SLD_id	DCSC_EFF_CALDT	EQTY_cat_cd
ARCHDOC_descr_tx	COMM_LNK_sp_fe_tx	DCSC_EXPLN_TX	EQTY_cgo_ar
ARCHDOC_id	COMM_LNK_thrupt_rt	DCSC_RSN_CD	EQTY_cgo_ht_dm
ARCHDOC_role_cd	COMM_LNK_TY_cd	DIT_cd	EQTY_cgo_lgth_dm
architect_POC_id	COMM_LNK_TY_chn_qy	DIT_cls_cd	EQTY_cgo_vol

c. Attribute Datatypes

Assignment of datatypes can have a dramatic impact on the efficiency of implementing the database. This is particularly true of the primary key attributes for the data model, since they are used for table joins that underlie user presentations and queries. Where possible, integer domains are preferred over strings, and shorter strings are preferred over longer strings. Table 21 lists the 93 primary key owned attributes used in the recommended data model for JCAPS together with their recommended datatype. Sorted by datatype, the table shows that 86 of the 93 attributes (88 percent) are given (32-bit) integer data type. Other occurrences of datatypes are:

- Two with two-character codes
- One with datetime datatype
- Three codes with smallint datatype
- One with varchar(50) datatype (for a text field not yet fully defined in JCAPS).

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Table 21. Datatypes in Owned Primary Key Attributes of the Recommended Data Model

Datatype	Attribute Name	Datatype	Attribute Name
char(2)	COUNTRY CODE	integer	NODE-COMMUNICATION-MEDIUM Identifier
char(2)	EXCHANGE-RELATIONSHIP-TYPE Code	integer	NODE-LINK-CAPABILITY Identifier
datetime	TASK-ASSOCIATION BEGIN DATE	integer	NODE-LINK-COMMUNICATION-MEDIUM Identifier
integer	AGREEMENT IDENTIFIER	integer	NODE-MATERIEL Identifier
integer	ARCHITECTURE Identifier	integer	NODE-ORGANIZATION Identifier
integer	ARCHITECTURE-AGREEMENT Identifier	integer	NODE-ORGANIZATION-TYPE Identifier
integer	ARCHITECTURE-ASSOCIATION Identifier	integer	NODE-PROCESS-ACTIVITY Identifier
integer	ARCHITECTURE-DOCUMENT Identifier	integer	NODE-SYSTEM Identifier
integer	ARCHITECTURE-INTEROPERABILITY-REQUIREMENT Identifier	integer	NODE-SYSTEM-ASSET-OWNERSHIP Identifier {JCAPS}
integer	ARCHITECTURE-NODE Identifier	integer	NODE-SYSTEM-ASSOCIATION Identifier {JCAPS}
integer	ARCHITECTURE-ORGANIZATION Identifier	integer	NODE-SYSTEM-COST-MANAGEMENT Identifier
integer	CAPABILITY IDENTIFIER	integer	NODE-TASK Identifier
integer	CAVEATED-SECURITY-CLASSIFICATION IDENTIFIER	integer	OPERATIONAL-MISSION-THREAD Identifier
integer	COMMUNICATION-CHANNEL Identifier {JCAPS}	integer	OPERATIONAL-MISSION-THREAD-ELEMENT Identifier
integer	COMMUNICATION-CIRCUIT Identifier {JCAPS}	integer	OPERATIONAL-SCENARIO Identifier
integer	COMMUNICATION-CIRCUIT-IER-ASSOCIATION Identifier {JCAPS}	integer	ORGANIZATION IDENTIFIER
integer	COMMUNICATION-CIRCUIT-TYPE Identifier {JCAPS}	integer	ORGANIZATION-ASSOCIATION Identifier
integer	COMMUNICATION-LINK-IER-ASSOCIATION Identifier {JCAPS}	integer	ORGANIZATION-LOCATION IDENTIFIER
integer	COMMUNICATION-LINK-TYPE Identifier {JCAPS}	integer	ORGANIZATION-TYPE IDENTIFIER
integer	COMMUNICATION-MEDIUM Identifier	integer	ORGANIZATION-TYPE-ASSOCIATION Identifier
integer	DATA-ITEM-TYPE Identifier	integer	PERIOD IDENTIFIER
integer	DOCUMENT IDENTIFIER	integer	POINT-OF-CONTACT Identifier
integer	DOCUMENT-ASSOCIATION Identifier	integer	PROCESS-ACTIVITY IDENTIFIER
integer	FUNCTIONAL-AREA IDENTIFIER	integer	PROCESS-ACTIVITY-ASSOCIATION Identifier
integer	GUIDANCE IDENTIFIER	integer	PROCESS-ACTIVITY-TASK Identifier
integer	GUIDANCE-ASSOCIATION IDENTIFIER	integer	REQUIRED-INTEROPERABILITY-CAPABILITY Identifier
integer	GUIDANCE-DOCUMENT Identifier	integer	SECURITY-ACCESS-COMPARTMENT IDENTIFIER
integer	INFO-ELEMENT IDENTIFIER	integer	SOFTWARE-ITEM-ASSOCIATION Identifier
integer	INFORMATION-EXCHANGE-MATRIX-ELEMENT Identifier	integer	SYSTEM Identifier
integer	INTERFACE Identifier {JCAPS}	integer	SYSTEM-ASSOCIATION IDENTIFIER
integer	INTERFACE-IER-ASSOCIATION Identifier {JCAPS}	integer	SYSTEM-CAPABILITY Identifier
integer	INTERFACE-TYPE Identifier {JCAPS}	integer	SYSTEM-EQUIPMENT-TYPE Identifier
integer	INTEROPERABILITY-REQUIREMENT-TASK Identifier	integer	SYSTEM-INTERFACE-DESCRIPTION-ELEMENT Identifier
integer	MATERIEL IDENTIFIER	integer	SYSTEM-INTERFACE-TYPE Identifier {JCAPS}
integer	MATERIEL-ASSOCIATION IDENTIFIER	integer	SYSTEM-ORGANIZATION Identifier
integer	MATERIEL-ITEM IDENTIFIER	integer	SYSTEM-SECURITY-CLASSIFICATION IDENTIFIER
integer	MATERIEL-ITEM-ASSOCIATION Identifier	integer	SYSTEM-SYSTEM-MATRIX-ELEMENT Identifier
integer	MATERIEL-ITEM-COST Identifier	integer	SYSTEM-TYPE Identifier
integer	MISSION IDENTIFIER	integer	SYSTEM-TYPE-ASSOCIATION Identifier {JCAPS}
integer	MISSION-ESSENTIAL-TASK-LIST-ELEMENT Identifier	integer	TASK IDENTIFIER
integer	NETWORK Identifier	integer	OBJECT_ID {JCAPS}
integer	NETWORK-ASSOCIATION IDENTIFIER	integer	PROPERTY_ID {JCAPS}
integer	NETWORK-NODE Identifier	smallint	COMMUNICATION-CIRCUIT-TYPE Code {JCAPS}
integer	NETWORK-ORGANIZATION Identifier	smallint	MISSION-AREA TYPE CODE
integer	NODE Identifier	smallint	SECURITY-CLASSIFICATION CODE
integer	NODE-ASSOCIATION Identifier	varchar(50)	USER-DEFINED-PROPERTY-DICTIONARY-ENUMERATION Value Text {JCAPS}
integer	NODE-ASSOCIATION-INTEROPERABILITY-REQUIREMENT Identifier	—	—

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For owned attributes other than primary key attributes, the distribution of datatypes is shown in Table 22. As many as 69 percent of the 231 coded attributes have datatype smallint, while another 21 percent have datatype char(1). The latter represents domains whose values have already been agreed in a specific user community. The wide distribution of domain types for identifier (integer and character strings from 5 to 255 characters) reflects the specification of alternate identifiers and identifiers in specific user domains (e.g., TASK Hierarchy Number Identifier was given a datatype of varchar (255) because it can be indefinitely long in hierarchically organizing a large group of TASKs).

Table 22. Datatypes in Owned Non-Primary-Key Attributes of the Recommended Data Model

Class Word	Datatype	Occurrences (Percent)
Amount	money	3
Area	float	1
Code	bit	1 (0.4%)
	char(1)	49 (21.2%)
	char(2)	2 (0.9%)
	char(4)	1 (0.4%)
	char(20)	1 (0.4%)
	smallint	160 (69.3%)
	varchar(2)	9 (3.9%)
	varchar(3)	3 (1.3%)
	varchar(4)	2 (0.9%)
	varchar(6)	2 (0.9%)
	varchar(14)	1 (0.4%)
Total		231
Dimension	float	4
Date	datetime	29
Identifier	char(8)	2 (6%)
	integer	7 (20%)
	varchar(5)	1 (3%)
	varchar(10)	1 (3%)
	varchar(12)	1 (3%)
	varchar(14)	2 (6%)
	varchar(16)	1 (3%)
	varchar(20)	8 (23%)
	varchar(32)	1 (3%)
	varchar(35)	1 (3%)
	varchar(50)	9 (26%)
	varchar(255)	1 (3%)
Total		35
Name	varchar(5)	1 (1%)
	varchar(10)	2 (3%)
	varchar(20)	5 (6%)
	varchar(30)	1 (1%)
	varchar(35)	1 (1%)
	varchar(40)	1 (1%)
	varchar(50)	41 (53%)
	varchar(60)	1 (1%)
	varchar(75)	1 (1%)
	varchar(99)	1 (1%)
	varchar(100)	2 (3%)
	varchar(240)	2 (3%)
	varchar(250)	17 (22%)
	varchar(255)	2 (3%)
Total		78

Class Word	Datatype	Occurrences (Percent)
Quantity	float	18 (50%)
	integer	16 (44%)
	real	2 (6%)
Total		36
Rate	decimal (6,2)	1 (4%)
	float	22 (96%)
	Total	23
Time	datetime	6 (67%)
	float	2 (22%)
	varchar(14)	1 (11%)
Total		9
Text	varchar(2)	1 (1%)
	varchar(20)	5 (4%)
	varchar(50)	6 (5%)
	varchar(99)	3 (3%)
	varchar(100)	6 (5%)
	varchar(150)	8 (7%)
	varchar(250)	10 (9%)
	varchar(255)	13 (11%)
	varchar(500)	1 (1%)
	varchar(512)	1 (1%)
	varchar(999)	4 (3%)
	varchar(1024)	1 (1%)
	varchar(2000)	38 (32%)
	varchar(8000)	20 (17%)
Total		117
Volume	float	1
Weight	float	1

Note: This table does not include datatypes for the attributes of the three user-defined-property tables, whose specification from JCAPS is incomplete.

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d. Null Options

Where possible, the recommendations shown in Annex J and listed in Annex M for attribute null options are to make values for every attribute optional (nulls allowed). This recommendation permits instances of an entity to be created and exchanged when one or more of the entity's attributes are unknown or not available. This recommendation should not be used to reduce the obligation of database managers to obtain values for all the attributes where possible, since the best entity instances are those where the full range of information is available for reference and exploitation.

Attributes that serve the role of a primary key (PK in Annex M) in an entity are never null. When primary key attributes of one entity migrate to become descriptive attributes of another entity, the values of those so called "foreign-key" attributes can be null if the relationship is both not identifying and not mandatory ("optional" or "nulls allowed" in Annex L).

Only two attributes in the proposed JCAPS View of the CADM have descriptive (non-primary-key) attributes that are specified as not null. These are the following:

- IER-ELEMENT Modeling and Simulation Indicator Code in INFO-EXCH-REQ-ELEMENT [this is a Boolean (Yes, No) datatype recorded as a single bit; it is not null because both 0 and 1 have meaning for this indicator code and null would be interpreted as 0]
- TASK IDENTIFIER (FK) in MISSION-ESSENTIAL-TASK-LIST-ELEMENT (not null ensures that a TASK is cited for each instance of the MISSION-ESSENTIAL-TASK-LIST-ELEMENT, which is a row in the MISSION-ESSENTIAL-TASK-LIST).

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IV. FUTURE WORK

A. INTRODUCTION

Nearly 2 years have elapsed since the completion of CADM 2.0. Additional work on the CADM is needed to address lessons learned, new requirements, and expected additions to the Architecture Framework. This chapter identifies activities outside the scope of the IDA task addressed in this document that warrant future work.

B. MERGING FULL SET OF ARMY AND NAVY EXTENSIONS INTO CADM

The Army and Navy have been independently extending the CADM to address Service-specific and potentially common data requirements for architecture databases. These extensions include choices of datatypes and codes for the data elements. To facilitate exchange of data among the architecture tools being developed by the two Services, efforts need to be made to modify these choices so that a single set of recommendations can be made for the CADM. The integration work should be done in an open forum that invites those interested in the CADM to share their views and obtain the widest possible agreement on the extension and physical details of the CADM.

C. USE OF XML IN SUPPORT OF ARCHITECTURES

1. General Remarks

Comments on conformance and data interoperability have included strong suggestions that architecture products ought to be exported and imported as Extensible Markup Language (XML) document files which—together with document type definitions (DTDs) and schemas—may define the syntax and semantics for an XML document. The advantage of this approach is that the exporting and importing systems would not require a CADM-conformant database or physical schema for the purpose of exchanging architecture products. The following pros were recently noted [Ref. BAH 2000]:

- There is a single file format that can be tested for conformance to the XML standard (using an XML parser) and validated against a CADM-derived DTD.
- Metadata extensions can be included with architecture documents.

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- XML is not specific to a platform or database management system.
- C4ISR Architecture documents in XML may be accessible to other applications. Using associated XML Style Sheets (XSLs), web browsers and other applications that know nothing about CADM, may be able to properly present architecture graphics.
- Metadata toolmakers are moving to XML (e.g., ERwin from Computer Associates and Rational Rose).

Two cons are worth noting:

- XML tags make XML documents very large, although compression algorithms may alleviate this aspect, as well as judicious use of predefined DTD <!ENTITY> declarations.
- Once an XML architecture product is imported, complex transliterations would be required to store its data in a local database that differs significantly from the creating database.

As more portions of the XML specification become approved by the World Wide Web Consortium (W3C) and browsers implement them, the transliteration and transformation work between XML-tagged architecture products and external architecture databases potentially become less cumbersome and more automated. In particular, the finalization of the XML Document Object Model (DOM)¹² may permit rapid transformations among XML documents that arise from databases with different underlying structures since the inherent tree structure of the XML document is generated by a simple call to the XML DOM and the mapping to alternative XML DOMs could be handled programmatically.

2. XML for Exchanging CADM Based Information

The advent of the Internet and its concomitant technologies offers a very important opportunity for making architecture data and architecture products readily available over the Internet or over secure special-purpose, but otherwise Web-like, networks. XML is one such technology with a potential for revolutionizing the way in which we transfer and display data on Web-like environments. This technology offers advantages as a data transport mechanism for communication among information systems in that it is text-oriented, can be narrowly tailored to the specific needs of the particular user community, and can take advantage of multiple commercial tools created to operate in a Web-like environment.

¹² The DOM specification can be found at the following URL: "<http://www.w3.org/TR/REC-DOM-Level-1>".

However, contrary to the Hypertext Markup Language (HTML) specification with its finite number of tags, the particular semantics of, and the XML tags to be used in, each XML document are not pre-defined (i.e., they need to be created for each intended role). XML technology has potential use in the generation and exchange of architecture data and products compliant with the *Architecture Framework*. However, the necessary XML specification for the tags, their semantics, and the reference data to support such an approach have not yet been worked out. One specific area of work consists in setting the XML specifications to be used to ensure that CADM-compliant data and architecture products can be exchanged using the XML technology. Future work in this area could include putting together all the DTDs necessary for validating XML documents that exchange data to be maintained in CADM-compliant databases, publish the DTDs, and keep them current as the CADM evolves.

3. XML for Exchanging Architecture Diagrams

XML offers substantial advantages not only as the transport mechanism for exchanging data among automated information systems, but, in conjunction with XML-related technologies such as Microsoft's Vector Markup Language (VML),¹³ it already offers the capability for providing sophisticated graphic displays when using appropriate browsers.¹⁴

Therefore, a second XML area to be considered for future work would be the specification of those objects required to make possible the exchange via XML documents of the actual architecture products. These area may require further extensions to the CADM because (1) the CADM does not currently address any diagram representation issues, and (2) standards for graphics rendering in XML are still emerging. The latter point may require that, depending on the maturity of the technologies available, the study team consider recommendations based only on a subset of all possible alternatives, e.g., prototype recommendations based only on Microsoft's Vector Markup Language (VML), if the W3C Scalable Vector Graphics (SVG)

¹³ VML is an application of XML 1.0 which defines a format for the encoding of vector information together with additional markup to describe how that information may be displayed and edited. Additional information on VML can be found at "<http://www.w3.org/TR/1998/NOTE-VML-19980513>".

¹⁴ Microsoft Internet Explorer Version 5 (IE5) and its later versions already support the initial specifications of the VML standard, and can dynamically generate graphics from an appropriately tagged XML document containing the VML extensions.

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specification for graphics generation does not receive sufficient support by any of the major software companies.¹⁵

If DoD had a full specification of the XML tags, their semantics, and the metadata required for data validation—that is an XML-ized CADM—to accompany the relational database model that it intends to use for the creation, maintenance, and exchange of all its architecture-related data, together with a specification of the VML or SVG tags needed to support graphic display, then such a set of specifications would offer a possible solution for how to standardize the actual communication and visualization of all architecture products among CADM-compliant systems. Such an XML-ized CADM potentially would:

- Allow DoD to implement a Web-like environment for creating, maintaining, and displaying its architecture products in order to support the complete life-cycle of its data systems
- Take advantage of commercially available tools and emerging technologies based on the XML approach
- Accelerate the process of getting agreement on how to handle new data requirements, since the XML specifications do not require any knowledge of specialized modeling languages such as IDEF1X
- Influence the development of tools that permit the exploitation of architecture data expressed in XML for its overall data systems acquisition planning.

The objective of future work in this area would therefore be to develop a proposal for the graphic extensions (e.g., VML extensions) required for the dynamic generation of architecture products directly out of an XML document when viewed by the user using nothing more than a commercial web-browser.¹⁶ This work would document the complete DTD for the CADM, as well as XML schemas that could be used to implement architecture product display in a Web-based and Web-like environment.

¹⁵ As of the writing of this document the Scalable Vector Graphics (SVG) 1.0 specification is still in the Candidate Recommendation phase. More information on the SVG specification can be found at "<http://www.w3.org/TR/SVG/>".

¹⁶ The JCAPS graphics engine is proprietary, and appears to be predicated on the use of other proprietary applications such as ORACLE for its proper functioning. Web-browsers, on the other hand, are offered free and, if they support VML, such as is the case with Microsoft IE5, they could provide, at minimal cost to the user, graphical display of properly tagged XML architecture documents. To achieve this, of course, the XML tags and VML extensions need to be created and agreed upon by the DoD architecture database community.

4. Maintaining the Links Between XML Architecture Diagrams and CADM-Based Information

A third, and, perhaps, more ambitious area for future work would be to provide the automated linkage between the architecture products and the underlying architecture data, so that the user can interactively, for example, drill down a particular icon in a node diagram, find out the size of the communication links depicted in an IER diagram, or dynamically change values in the underlying database while viewing a given architecture product. At present some technologies, such as Microsoft Active Server Pages (ASP)¹⁷ offer the potential for dynamically linking the information contained in an XML document, and displayed on the client site with a browser, with the database on the server side out of which the document was created and where the underlying data is normally maintained.

To achieve the level of interactivity described above would require the specification of the objects that can be manipulated in each architecture diagram, together with the generation of all the scripts—either Visual Basic Script, or JAVA scripts—that provide the behavior intended for each one of them. It's clear, though, that linking architecture semantics to the diagrams will be a larger effort that may require more than one phase to accomplish, and which will have a stronger research flavor. However, developing such a product will arguably be much more valuable to the overall architecture work that DoD is engaged in.

D. CLARIFYING DISTINCTIONS FOR LINK, CIRCUIT, AND CHANNEL

The CADM assumes that the specifications of SYSTEM-ASSOCIATION and related entities would suffice to provide minimum data required for Framework 2.0 architecture products. Extensions to the CADM by JCAPS have included the following entities that more explicitly identify and characterize communication elements needed for detailed requirements analysis and subsequent simulations: CIRCUIT-IER-ASSOCIATION (renamed COMMUNICATION-CIRCUIT-IER-ASSOCIATION), COMMUNICATION-CHANNEL, COMMUNICATION-LINK-TYPE, INTERFACE, INTERFACE-TYPE, LINK-IER-ASSOCIATION (renamed COMMUNICATION-LINK-IER-ASSOCIATION), COMMUNICATION-CIRCUIT, and COMMUNICATION-CIRCUIT-TYPE.

Reviewers of these structures have not always understood their precise role in the CADM and their relationship to other entities of the CADM (e.g., NODE and NETWORK). Discussions with the JCAPS implementors are needed to clarify their roles in architecture products. Discussions with communication system analysts, modelers, and simulators are needed to refine

¹⁷ Further information on ASP technology can be found at "<http://msdn.microsoft.com/library/>".

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their role (and add attributes as necessary) to exploit their applicability to communications network analysis.

Analysis of approved DoD data standards in the telecommunications area is needed to identify overlaps and to develop recommendations for incorporating and modifying the standards for DoD architecture databases. Figure 3 provides an IDEF1X representation of the DoD approved entities and attributes related to TELECOMMUNICATION-NETWORK-ELEMENT, which is a view of the C2 Core Data Model (C2CDM). It would be the starting point for that analysis.

E. IDENTIFYING AND INCORPORATING SYSTEM DATA ELEMENTS FROM LISI

For several years, MITRE has been developing and expanding the application of a database and application software to support analysis of Levels of Information System Interoperability (LISI). This database and software provides a very flexible capability to develop and tailor questionnaires regarding the capabilities and limitations of systems by which to segregate them into specific levels that measure the kinds of information that can be exchanged among systems at the same level (e.g., messages, files, database transactions). The SYSTEM-related entities of the CADM could be greatly expanded in detail and scope by incorporating data elements corresponding to the most commonly used and relevant questions available in the LISI software and database. At present, CADM only records the LISI levels for SYSTEM-ASSOCIATION.

F. INCORPORATING NEW DATA REQUIREMENTS FROM FRAMEWORK 2.1

A new version of the Architecture Framework has begun, which will identify new architecture products that the CINCs, Services, and Military Agencies have found useful. Therefore, a new version of the CADM should be developed to incorporate all the data requirements underlying these new architecture products (and agreed changes to previously defined architecture products).

Figure 3. DoD TELECOMMUNICATION-NETWORK-ELEMENT Data Standards

G. DEVELOPING DATA STRUCTURES AND DATA FOR ICON CATALOG

A common element of architecture drawing underlying detailed architecture products is the choice of icons to use. The most frequently used icons are for representing organizations by type (the label for the organization is often added to the icon) and lines of communication (e.g., communication links, communication circuits). While there are standards for many of these icons, it would be helpful to the architecture community to have an agreed catalog of these icons (created and centrally stored once; used by all). It would also be helpful to associate each ORGANIZATION-TYPE with a single icon to be used for all ORGANIZATIONS of that type, and similarly for EQUIPMENT-TYPES and SYSTEMS. The data elements for that icon catalog could be added to the CADM, as well as the relationships to be enforced. A common icon catalog would greatly improve the common look (and potentially feel) of architecture products developed by different architecture tools.

H. FINDING TOOL-INDEPENDENT DATA ELEMENTS FOR STORING DIAGRAMS

As noted, the CADM is silent on what data structures may be needed to support drawing tools used by architecture software to create, store, and manage architecture products. JCAPS has 21 entities supporting its drawing tools in JCAPS 2.1, and these entities or their equivalents would be required when migrating or converting to a CADM-compliant database. Drawing tools such as netVizTM are also widely used with architecture databases; indeed, netViz was adopted by SIGCEN and PEO-C3S for integrating their databases and displaying common architecture products for Baseline 1.0 of the Army CADM (known as the ASA data model) issued in September 1999. Baseline 1.0 had four netViz specific entities and 59 netViz-specific attributes to record drawing information in the ASA database.

An alternative to relying on implementation-specific drawing packages or XML documents would be to discuss whether there are common tool-independent entities and attributes that should be added to the CADM to address drawing-related data requirements. If a robust set of such data elements could be identified and agreed, architecture databases conforming to those data elements would be able to exchange drawing details without having to agree on a drawing tool.

I. DATATYPES FOR GLOBALLY UNIQUE IDENTIFIERS

At present, the implementors of the Army CADM have agreed to use 32-bit integers for primary key attributes with class word "identifier". In the future, 64-bit integers are expected to

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be used as soon as they are commonly available in the database management systems chosen by the implementors.

Analysis should also be made of an alternate strategy using Globally Unique Identifiers (GUIDs; also called UUIDs in the Distributed Computing Environment), which are generated in Microsoft products using an Open Software Foundation specification and are guaranteed to be unique in time and space for many centuries. GUIDs are available as existing data types in latest versions of Oracle, SQL Server, and Access 2000, and they are in common use commercially in many areas for other than database record keys. GUIDs are structured in the following major parts: DWORD (32 bits), WORD (16-bits), WORD (16 bits), and BYTE (8 bits; repeated eight times). The following additional information is helpful:¹⁸

This structure provides applications with some way of addressing the parts of a GUID for debugging purposes, if necessary. This information is also needed when GUIDs are transmitted between machines of different byte orders.

For the most part, applications never manipulate GUIDs directly--they are almost always manipulated either as a constant, such as with interface identifiers, or as a variable of which the absolute value is unimportant. For example, a client might enumerate all object classes registered on the system and display a list of those classes to an end user. That user selects a class from the list which the client then maps to an absolute CLSID value. The client does not care what that value is--it simply knows that it uniquely identifies the object that the user selected.

The GUID design allows for coexistence of several different allocation technologies, but the one by far most commonly used incorporates a 48-bit machine unique identifier together with the current UTC time and some persistent backing store to guard against retrograde clock motion. It is in theory capable of allocating GUIDs at a rate of 10,000,000 per second per machine for the next 3240 years, enough for most purposes.

¹⁸ Source: http://www.opengroup.org/comsource/techref2/CHP04GDC.HTM#anch_0165.

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ANNEX A. JCAPS 2.1 DATA MODEL DIAGRAMS

- 1. Entity Index (p. A-3)**
- 2. Logical View of JCAPS 2.1 (pp. A-4 to A-7)**
- 3. Physical View of JCAPS 2.1 (pp. A-8 to A-12)**

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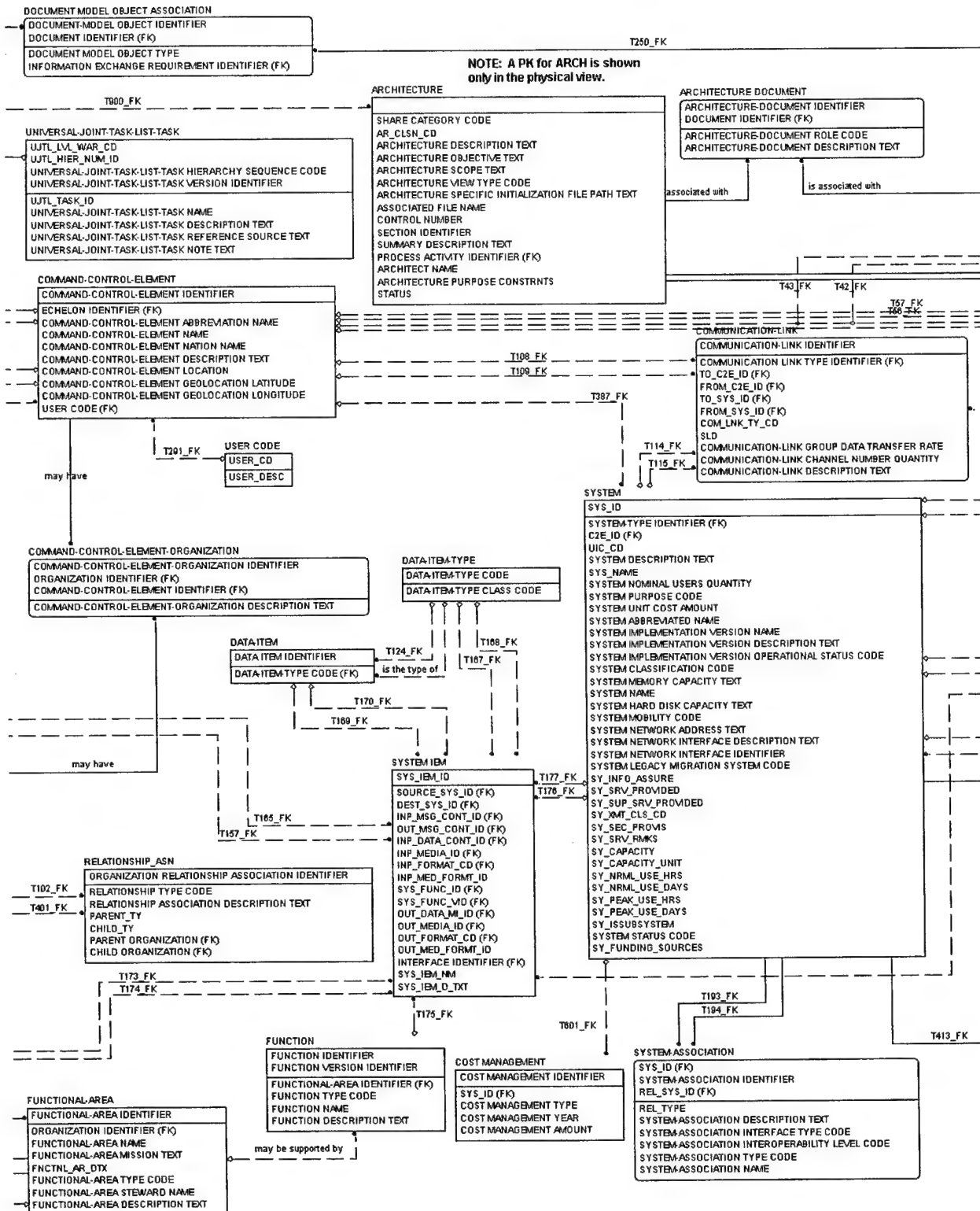
Table A-1. Index to Entities in Data Model Diagrams—Logical View and Physical View

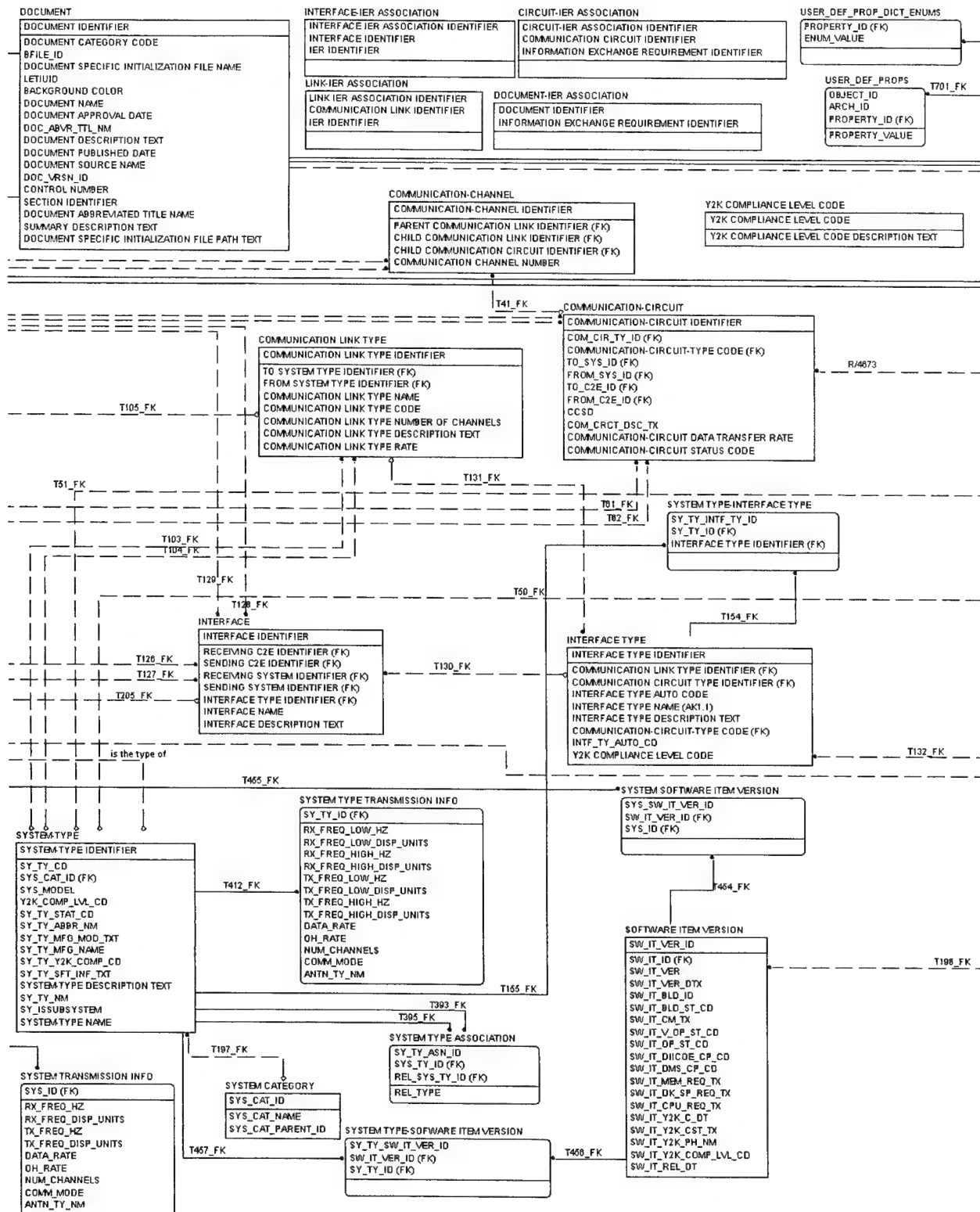
Entity Name	Log Page	Phys Page
ARCHITECTURE	A-5	A-9
ARCHITECTURE DOCUMENT	A-5	A-9
ARM CODE	A-4	A-8
ASSET OWNERSHIP	A-7	A-12
CIRCUIT-IER ASSOCIATION	A-6	A-11
COMMAND-CONTROL-ELEMENT	A-5	A-9
COMMAND-CONTROL-ELEMENT-ORGANIZATION	A-5	A-9
COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY	A-7	A-11
COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE	A-7	A-11
COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE	A-7	A-11
COMMUNICATION LINK TYPE	A-5	A-9
COMMUNICATION-CHANNEL	A-6	A-10
COMMUNICATION-CIRCUIT	A-6	A-10
COMMUNICATION-CIRCUIT-TYPE	A-7	A-11
COMMUNICATION-LINK	A-5	A-9
COMMUNICATION-MEDIUM	A-4	A-8
COST MANAGEMENT	A-5	A-10
COUNTRY	A-4	A-8
DATABASE_VERSION	A-7	A-14
DATA-ITEM	A-5	A-9
DATA-ITEM-TYPE	A-5	A-9
DOCUMENT	A-6	A-10
DOCUMENT MODEL OBJECT ASSOCIATION	A-5	A-8
DOCUMENT-IER ASSOCIATION	A-6	A-11
DRAW POINTS	A-7	A-12
DRAWGRPMEMBERS	A-7	A-12
DRAW-MODEL OBJECT ASSOCIATION	A-7	A-12
DRAWOBJECT	A-7	A-12
DRAWTEXT	A-7	A-12
ECHOLON	A-4	A-8
EXCHANGE-NEED-LINE-REQUIREMENT	A-4	A-8
FUNCTION	A-4	A-8
FUNCTIONAL-AREA	A-5	A-9
INFORMATION-EXCHANGE-REQUIREMENT	A-4	A-8
INTERFACE	A-6	A-10
INTERFACE TYPE	A-6	A-11
INTERFACE-IER ASSOCIATION	A-6	A-10
LINK-IER ASSOCIATION	A-6	A-10

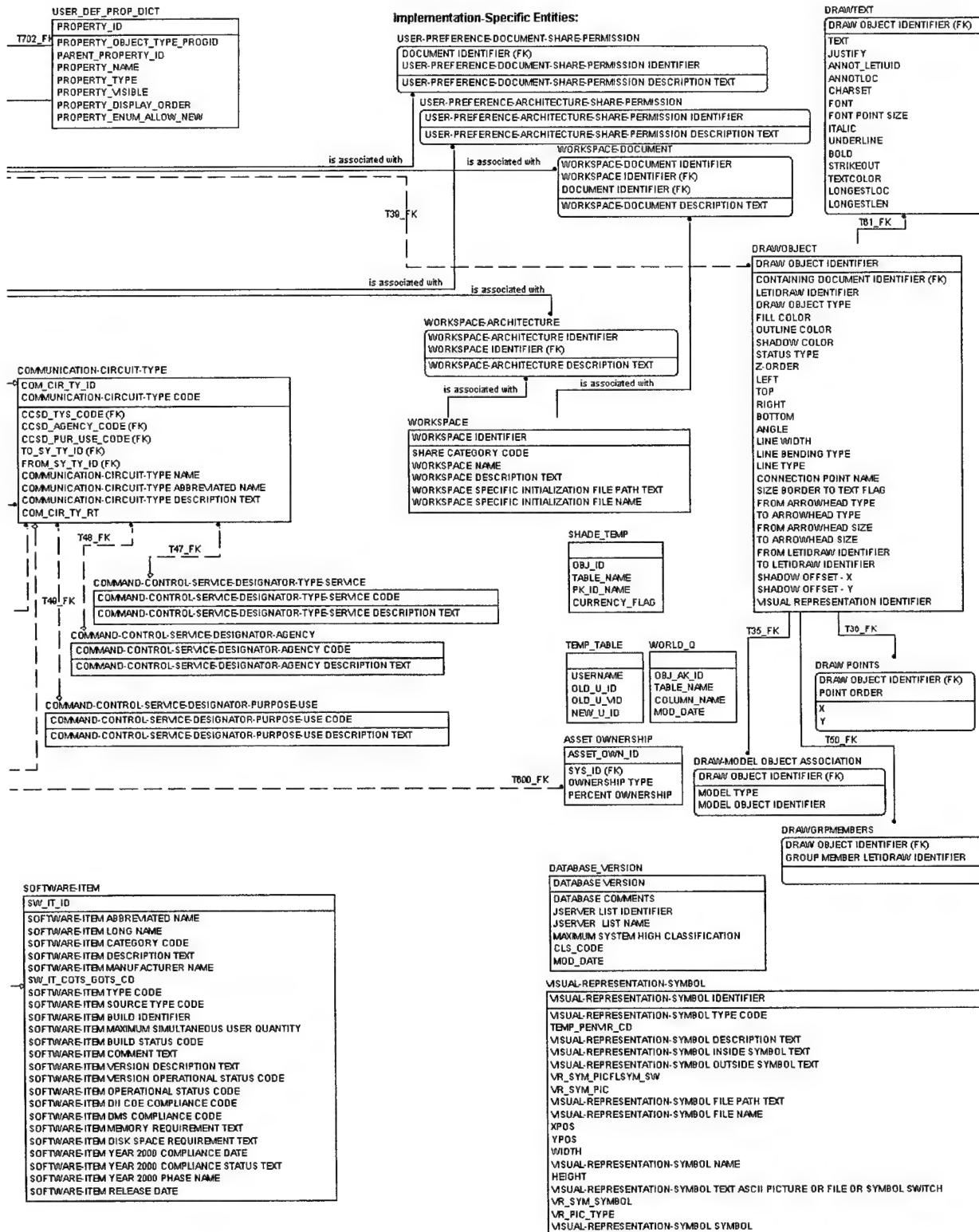
Entity Name	Log Page	Phys Page
MESSAGE	A-4	A-8
MISSION-AREA	A-4	A-9
MISSION-AREA-FUNCTIONAL-AREA	A-4	A-9
ORGANIZATION	A-4	A-8
PROCESS-ACTIVITY	A-4	A-8
QUERIES	A-7	A-12
QUERY ENTRIES	A-7	A-12
RELATIONSHIP_ASN	A-5	A-8*
REPORT_FIELDS	A-7	A-12
REPORTS	A-7	A-12
SERVICE CODE	A-4	A-8
SHADE_TEMP	A-7	A-12
SOFTWARE ITEM VERSION	A-6	A-11
SOFTWARE-ITEM	A-7	A-11
SYSTEM	A-5	A-10
SYSTEM CATEGORY	A-6	A-10
SYSTEM IEM	A-5	A-9
SYSTEM SOFTWARE ITEM VERSION	A-6	A-11
SYSTEM TRANSMISSION INFO	A-6	A-10
SYSTEM TYPE ASSOCIATION	A-6	A-9
SYSTEM TYPE TRANSMISSION INFO	A-6	A-10
SYSTEM TYPE-INTERFACE TYPE	A-6	A-9
SYSTEM TYPE-SOFTWARE ITEM VERSION	A-6	A-11
SYSTEM-ASSOCIATION	A-5	A-10
SYSTEM-TYPE	A-6	A-9
TASK-MISSION-AREA	A-4	A-8
TEMP_TABLE	A-7	A-12
UNIVERSAL-JOINT-TASK-LIST-TASK	A-5	A-8
USER CODE	A-5	A-9
USER_DEF_PROP_DICT	A-7	A-11
USER_DEF_PROP_DICT_ENUMS	A-6	A-11
USER_DEF_PROPS	A-6	A-11
USER-PREFERENCE-ARCHITECTURE-SHARE-PERMISSION	A-7	A-12
USER-PREFERENCE-DOCUMENT-SHARE-PERMISSION	A-7	A-12
VISUAL-REPRESENTATION-SYMBOL	A-7	A-12
WORKSPACE	A-7	A-12
WORKSPACE-ARCHITECTURE	A-7	A-12
WORKSPACE-DOCUMENT	A-7	A-12
WORLD_Q	A-7	A-12
Y2K COMPLIANCE LEVEL CODE	A-6	A-11

Note: Log = Logical View (4 pp); Phys = Physical View (5 pp).









IER

ARCH_ID: VARCHAR2(50) NULL (FK)
 IER_ID: VARCHAR2(50) NOT NULL
 IER_VID: NUMBER(12) NOT NULL

PRCS_ACTY_ID: VARCHAR2(50) NULL (FK)
 PRCS_ACTY_VID: NUMBER(12) NULL (FK)
 PRCS_ACTY_NM_1: VARCHAR2(250) NULL
 WAR_CD_1: CHAR(2) NULL
 PRCS_ACTY_VID: VARCHAR2(50) NULL (FK)
 PRCS_ACTY_NM_2: VARCHAR2(250) NULL
 WAR_CD_2: CHAR(2) NULL
 NUM_ID_2: VARCHAR2(50) NULL
 NUM_ID_1: VARCHAR2(50) NULL
 MESSAGE_ID: VARCHAR2(50) NULL (FK)
 MESSAGE_VID: NUMBER(12) NULL (FK)
 ICOM_NAME: VARCHAR2(250) NULL
 ICOM_VID: NUMBER(12) NULL
 FREQ_BAND_ID: VARCHAR2(50) NULL
 FREQ_BAND_VID: NUMBER(12) NULL (FK)
 C2E_ID: VARCHAR2(50) NULL (FK)
 C2E_VID: NUMBER(12) NULL (FK)
 C2E_NM_1: VARCHAR2(250) NULL
 C2E_ID: VARCHAR2(50) NULL (FK)
 C2E_NM_2: VARCHAR2(250) NULL
 DRG_ID: VARCHAR2(50) NULL (FK)
 DRG_VID: NUMBER(12) NULL (FK)
 DRG_NM_1: VARCHAR2(250) NULL
 DRG_ID: VARCHAR2(50) NULL (FK)
 DRG_VID: NUMBER(12) NULL (FK)
 DRG_NM_2: VARCHAR2(250) NULL
 SEQ_NO_ID: VARCHAR2(50) NULL
 SEQ_NO_VID: NUMBER(12) NULL
 SCENARIO_ID: VARCHAR2(50) NULL
 SCENARIO_VID: NUMBER(12) NULL
 IE_MESSAGE_NAME: VARCHAR2(250) NULL
 IE_TIMELINESS: VARCHAR2(250) NULL
 IE_FREQ_OF_EXCN: VARCHAR2(250) NULL
 IE_MSG_MEDIA_TX: VARCHAR2(2000) NULL
 IE_THROUGHPUT: VARCHAR2(250) NULL
 IE_THRPUT_UNITS: VARCHAR2(250) NULL
 IE_PRIORITY: VARCHAR2(250) NULL
 IER_ACC_DT: VARCHAR2(2000) NULL
 IER_AVAL_IND_CD: VARCHAR2(35) NULL
 IER_CNTH_DT: VARCHAR2(2000) NULL
 IER_INF_CLS_CODE: VARCHAR2(35) NULL
 IER_INTROP_LVA_CD: VARCHAR2(35) NULL
 IER_PPFS_DT: VARCHAR2(2000) NULL
 IER_QUAL_CD: VARCHAR2(35) NULL
 IER_SEC_LVA_CD: VARCHAR2(35) NULL
 IER_SBSCN_TX: VARCHAR2(2000) NULL
 IER_TMLY_CD: VARCHAR2(35) NULL
 IER_TRNSACT_TX: VARCHAR2(2000) NULL
 IER_VA_IND_CD: VARCHAR2(35) NULL
 IER_INF_ELMT_QTY: NUMBER(5) NULL
 IER_RNG_TX: VARCHAR2(2000) NULL
 IER_RNG_UN_TX: VARCHAR2(2000) NULL
 IER_MEDIUM_TX: VARCHAR2(2000) NULL
 IER_CAPABILITY_TX: VARCHAR2(2000) NULL
 MSN_AR_VID: NUMBER(12) NULL (FK)
 FNCT_AREA_VID: NUMBER(12) NULL (FK)
 COM_MED_ID: VARCHAR2(50) NULL (FK)
 COM_MED_VID: NUMBER(12) NULL (FK)
 AK_ID: NUMBER(12) NOT NULL
 CLS_CODE: VARCHAR2(35) NOT NULL
 CURRENCY_FLAG: CHAR(1) NOT NULL
 MOD_DATE: DATE NOT NULL
 SHADE_FLAG: CHAR(1) NOT NULL
 CREATE_DATE: DATE NOT NULL
 ARCHIVE_DATE: DATE NULL

ARM_CODE

ARM_CODE_ID: VARCHAR2(50) NOT NULL
 ARM_CODE_TXT: VARCHAR2(250) NULL
 AK_ID: NUMBER(12) NOT NULL
 CLS_CODE: VARCHAR2(35) NOT NULL
 CURRENCY_FLAG: CHAR(1) NOT NULL
 MOD_DATE: DATE NOT NULL
 SHADE_FLAG: CHAR(1) NOT NULL
 CREATE_DATE: DATE NOT NULL
 ARCHIVE_DATE: DATE NULL

SERVICE_CODE

SERVICE_CODE_ID: VARCHAR2(50) NOT NULL
 SERVICE_CODE_TXT: VARCHAR2(250) NULL
 AK_ID: NUMBER(12) NOT NULL
 CLS_CODE: VARCHAR2(35) NOT NULL
 CURRENCY_FLAG: CHAR(1) NOT NULL
 MOD_DATE: DATE NOT NULL
 SHADE_FLAG: CHAR(1) NOT NULL
 CREATE_DATE: DATE NOT NULL
 ARCHIVE_DATE: DATE NULL

PROCESS_ACTIVITY

ARCH_ID: VARCHAR2(50) NOT NULL
 PRCS_ACTY_ID: VARCHAR2(50) NOT NULL
 PRCS_ACTY_VID: NUMBER(12) NOT NULL

PRD_ACT_UJTL_CD: VARCHAR2(35) NULL
 UJTL_LVA_WAR_CD: CHAR(2) NULL (FK)
 UJTL_LVA_WAR_VID: NUMBER(12) NULL (FK)
 UJTL_HIER_NUM_ID: VARCHAR2(50) NULL (FK)
 UJTL_HIER_VID: NUMBER(12) NULL (FK)
 UJTL_TASK_ID: VARCHAR2(50) NULL
 ACTION_ID: VARCHAR2(50) NULL
 ACTION_VID: NUMBER(12) NULL
 PRCS_HIER_NUM_ID: VARCHAR2(50) NULL
 UJTL_TASK_HIER_SEQ_CD: CHAR(10) NULL (FK)
 PRCS_ACTY_CRTN_DT: DATE NULL
 PRCS_ACTY_DFN_TX: VARCHAR2(2000) NULL
 PRCS_ACTY_NM: VARCHAR2(250) NULL
 PRCS_ACTY_SRC_DT: VARCHAR2(2000) NULL
 PRCS_ACTY_DERIV: VARCHAR2(250) NULL
 UJTL_1: CHAR(10) NULL (FK)
 AK_ID: NUMBER(12) NOT NULL
 CLS_CODE: VARCHAR2(35) NOT NULL
 CURRENCY_FLAG: CHAR(1) NOT NULL
 MOD_DATE: DATE NOT NULL
 SHADE_FLAG: CHAR(1) NOT NULL
 CREATE_DATE: DATE NOT NULL
 PRCS_ACTY_SCP_DT: VARCHAR2(2000) NULL
 ARCHIVE_DATE: DATE NULL

MESSAGE

ARCH_ID: VARCHAR2(50) NOT NULL
 MESSAGE_ID: VARCHAR2(50) NOT NULL
 MESSAGE_VID: NUMBER(12) NOT NULL

MESSAGE_NAME: VARCHAR2(250) NULL
 MSG_DSC_TX: VARCHAR2(2000) NULL
 MSG_VA_IND_CD: VARCHAR2(35) NULL
 TIMELINESS: VARCHAR2(250) NULL
 FREQ_OF_EXCN: VARCHAR2(250) NULL
 CORE_TASK: VARCHAR2(50) NULL
 SECURITY: VARCHAR2(250) NULL
 MSG_MEDIA_TX: VARCHAR2(2000) NULL
 THROUGHPUT: NUMBER(12) NULL
 THRPUT_UNITS: VARCHAR2(250) NULL
 PRIORITY: VARCHAR2(250) NULL
 MESSAGE_NM: VARCHAR2(250) NOT NULL
 PERISH_FLAG: CHAR(1) NULL
 AK_ID: NUMBER(12) NOT NULL
 MESSAGE_DSC_TX: VARCHAR2(2000) NULL
 CLS_CODE: VARCHAR2(35) NOT NULL
 CURRENCY_FLAG: CHAR(1) NOT NULL
 MOD_DATE: DATE NOT NULL
 SHADE_FLAG: CHAR(1) NOT NULL
 CREATE_DATE: DATE NOT NULL
 ARCHIVE_DATE: DATE NULL

COUNTRY

CTRY_CD: CHAR(2) NOT NULL
 CTRY_VID: NUMBER(12) NOT NULL

CTRY_ABBRD_NM: VARCHAR2(35) NULL
 CTRY_NM: VARCHAR2(50) NULL
 CTRY_OFF_NM: VARCHAR2(75) NULL
 CTRY_SCP_NT_TX: VARCHAR2(50) NULL
 CTRY_PSTL_NM: VARCHAR2(35) NULL
 AK_ID: NUMBER(12) NOT NULL
 CLS_CODE: VARCHAR2(35) NOT NULL
 CURRENCY_FLAG: CHAR(1) NOT NULL
 MOD_DATE: DATE NOT NULL
 SHADE_FLAG: CHAR(1) NOT NULL
 CREATE_DATE: DATE NOT NULL
 ARCHIVE_DATE: DATE NULL

ECHOLON

ECHOLON_ID: VARCHAR2(50) NOT NULL
 ECHOLON_VID: NUMBER(12) NOT NULL

ECHOLON_NAME: VARCHAR2(250) NULL
 EHLN_DSC_TX: VARCHAR2(2000) NULL
 EHLN_ABRV_CD: VARCHAR2(35) NULL
 AK_ID: NUMBER(12) NOT NULL
 CLS_CODE: VARCHAR2(35) NOT NULL
 CURRENCY_FLAG: CHAR(1) NOT NULL
 MOD_DATE: DATE NOT NULL
 SHADE_FLAG: CHAR(1) NOT NULL
 CREATE_DATE: DATE NOT NULL
 ARCHIVE_DATE: DATE NULL

DOC_MDL_ASN

DOC_MDL_ID: VARCHAR2(50) NOT NULL
 DOC_ID: VARCHAR2(50) NOT NULL (FK)
 DOC_VID: NUMBER(12) NOT NULL (FK)

DOC_MDL_TYPE: VARCHAR2(35) NULL
 ARCH_ID: VARCHAR2(50) NULL (FK)
 IER_ID: VARCHAR2(50) NULL (FK)
 IER_VID: NUMBER(12) NULL (FK)
 AK_ID: NUMBER(12) NOT NULL
 CLS_CODE: VARCHAR2(35) NOT NULL
 CURRENCY_FLAG: CHAR(1) NOT NULL
 MOD_DATE: DATE NOT NULL
 SHADE_FLAG: CHAR(1) NOT NULL
 CREATE_DATE: DATE NOT NULL
 ARCHIVE_DATE: DATE NULL
 D_MASK: VARCHAR2(255) NULL

EXCN_NO_LN_READMT

ARCH_ID: VARCHAR2(50) NOT NULL (FK)
 EXCN_NO_LN_REQ_ID: VARCHAR2(50) NOT NULL
 EXCN_NO_LN_REQ_VID: NUMBER(12) NOT NULL

C2E_ID: VARCHAR2(50) NULL (FK)
 C2E_ID: VARCHAR2(50) NULL (FK)
 DRG_ID: VARCHAR2(50) NULL (FK)
 DRG_VID: NUMBER(12) NULL (FK)
 C2E_VID: NUMBER(12) NULL (FK)
 DRG_VID: NUMBER(12) NULL (FK)
 ENLR_AUTOM_PRTY_CD: VARCHAR2(35) NULL
 ENLR_AVAL_IND_CD: VARCHAR2(35) NULL
 ENLR_CNSTR_TX: VARCHAR2(2000) NULL
 ENLR_FCHTY_TX_CD: VARCHAR2(35) NULL
 ENLR_CRIT_CD: VARCHAR2(35) NULL
 ENLR_SEC_LVA_CD: VARCHAR2(35) NULL
 ENLR_TMLY_CD: VARCHAR2(35) NULL
 EXCN_NO_LN_REQ_DTX: VARCHAR2(2000) NULL
 AK_ID: NUMBER(12) NOT NULL
 CLS_CODE: VARCHAR2(35) NOT NULL
 CURRENCY_FLAG: CHAR(1) NOT NULL
 MOD_DATE: DATE NOT NULL
 SHADE_FLAG: CHAR(1) NOT NULL
 CREATE_DATE: DATE NOT NULL
 ARCHIVE_DATE: DATE NULL

ORGANIZATION

ARCH_ID: VARCHAR2(50) NOT NULL
 ORG_ID: VARCHAR2(50) NOT NULL
 ORG_VID: NUMBER(12) NOT NULL

EHLN_LVA_CD: VARCHAR2(35) NULL
 EHLN_LVA_VID: NUMBER(12) NULL
 ECHOLON_ID: VARCHAR2(50) NULL (FK)
 ECHOLON_VID: NUMBER(12) NULL (FK)
 CTRY_CD: CHAR(2) NULL (FK)
 CTRY_VID: NUMBER(12) NULL (FK)
 UIC_CD: VARCHAR2(35) NULL
 UIC_VID: NUMBER(12) NULL
 ORG_DSC_TX: VARCHAR2(2000) NULL
 ORG_CAT_CD: VARCHAR2(35) NULL
 ORG_ADMN_LOS_RT: NUMBER(15) NULL
 ORG_DUR_TX_CD: VARCHAR2(35) NULL
 ORG_FR_FOE_CD: VARCHAR2(35) NULL
 ORG_CLSN_CD: VARCHAR2(35) NULL
 ORG_OPRNL_ELMT_IC: VARCHAR2(35) NULL
 ORG_PRM_ACTY_CD: VARCHAR2(35) NULL
 ORG_TY_CD: VARCHAR2(35) NULL
 ORG_CUR_NM: VARCHAR2(50) NULL
 ORG_CUR_ABRV_NM: VARCHAR2(250) NULL
 ORG_ENTRPZ_TX_CD: VARCHAR2(35) NULL
 ORG_ADDRESS_TXT: VARCHAR2(2000) NULL
 ORG_SRV_TX_CD: VARCHAR2(50) NULL (FK)
 ORG_ASN_TX_CD: VARCHAR2(50) NULL (FK)
 AK_ID: NUMBER(12) NOT NULL
 ORG_PRM_INDS_CAT_CD: VARCHAR2(35) NULL
 CLS_CODE: VARCHAR2(35) NOT NULL
 CURRENCY_FLAG: CHAR(1) NOT NULL
 MOD_DATE: DATE NOT NULL
 SHADE_FLAG: CHAR(1) NOT NULL
 ORG_WDR_IND_CD: VARCHAR2(35) NULL
 CREATE_DATE: DATE NOT NULL
 ARCHIVE_DATE: DATE NULL

UJTL_TASK

UJTL_LVA_WAR_CD: CHAR(2) NOT NULL
 UJTL_LVA_WAR_VID: NUMBER(12) NOT NULL
 UJTL_HIER_NUM_ID: VARCHAR2(50) NOT NULL
 UJTL_HIER_VID: NUMBER(12) NOT NULL
 UJTL_TASK_HIER_SEQ_CD: CHAR(10) NOT NULL
 UJTL_1: CHAR(10) NOT NULL

UJTL_TASK_ID: VARCHAR2(50) NULL
 UJTL_TASK_NM: VARCHAR2(100) NULL
 UJTL_TASK_DTX: VARCHAR2(2000) NULL
 UJTL_TASK_REF_TX: VARCHAR2(100) NULL
 UJTL_TASK_NOTE_TX: VARCHAR2(2000) NULL
 AK_ID: NUMBER(12) NOT NULL
 CLS_CODE: VARCHAR2(35) NOT NULL
 CURRENCY_FLAG: CHAR(1) NOT NULL
 MOD_DATE: DATE NOT NULL
 SHADE_FLAG: CHAR(1) NOT NULL
 CREATE_DATE: DATE NOT NULL
 ARCHIVE_DATE: DATE NULL

RELATIONSHIP_ASN

ARCH_ID: VARCHAR2(50) NOT NULL (FK)
 REL_ASN_ID: VARCHAR2(50) NOT NULL
 REL_ASN_VID: NUMBER(12) NOT NULL

RLTN_TY_TX_CD: VARCHAR2(35) NULL
 REL_ASN_DSC_TX: VARCHAR2(2000) NULL
 PARENT_TY: NUMBER(3) NULL
 CHILD_TY: NUMBER(3) NULL
 ORG_ID: VARCHAR2(50) NULL (FK)
 ORG_VID: NUMBER(12) NULL (FK)
 ORG_ID: VARCHAR2(50) NULL (FK)
 ORG_VID: NUMBER(12) NULL (FK)
 AK_ID: NUMBER(12) NOT NULL
 CLS_CODE: VARCHAR2(35) NOT NULL
 CURRENCY_FLAG: CHAR(1) NOT NULL
 MOD_DATE: DATE NOT NULL
 SHADE_FLAG: CHAR(1) NOT NULL
 CREATE_DATE: DATE NOT NULL
 ARCHIVE_DATE: DATE NULL

COM_MED

ARCH_ID: VARCHAR2(50) NOT NULL
 COM_MED_ID: VARCHAR2(50) NOT NULL
 COM_MED_VID: NUMBER(12) NOT NULL

COM_MED_NM: VARCHAR2(250) NULL
 COM_MED_ABRV_NM: VARCHAR2(250) NULL
 AK_ID: NUMBER(12) NOT NULL
 CLS_CODE: VARCHAR2(35) NOT NULL
 CURRENCY_FLAG: CHAR(1) NOT NULL
 MOD_DATE: DATE NOT NULL
 SHADE_FLAG: CHAR(1) NOT NULL
 CREATE_DATE: DATE NOT NULL
 ARCHIVE_DATE: DATE NULL

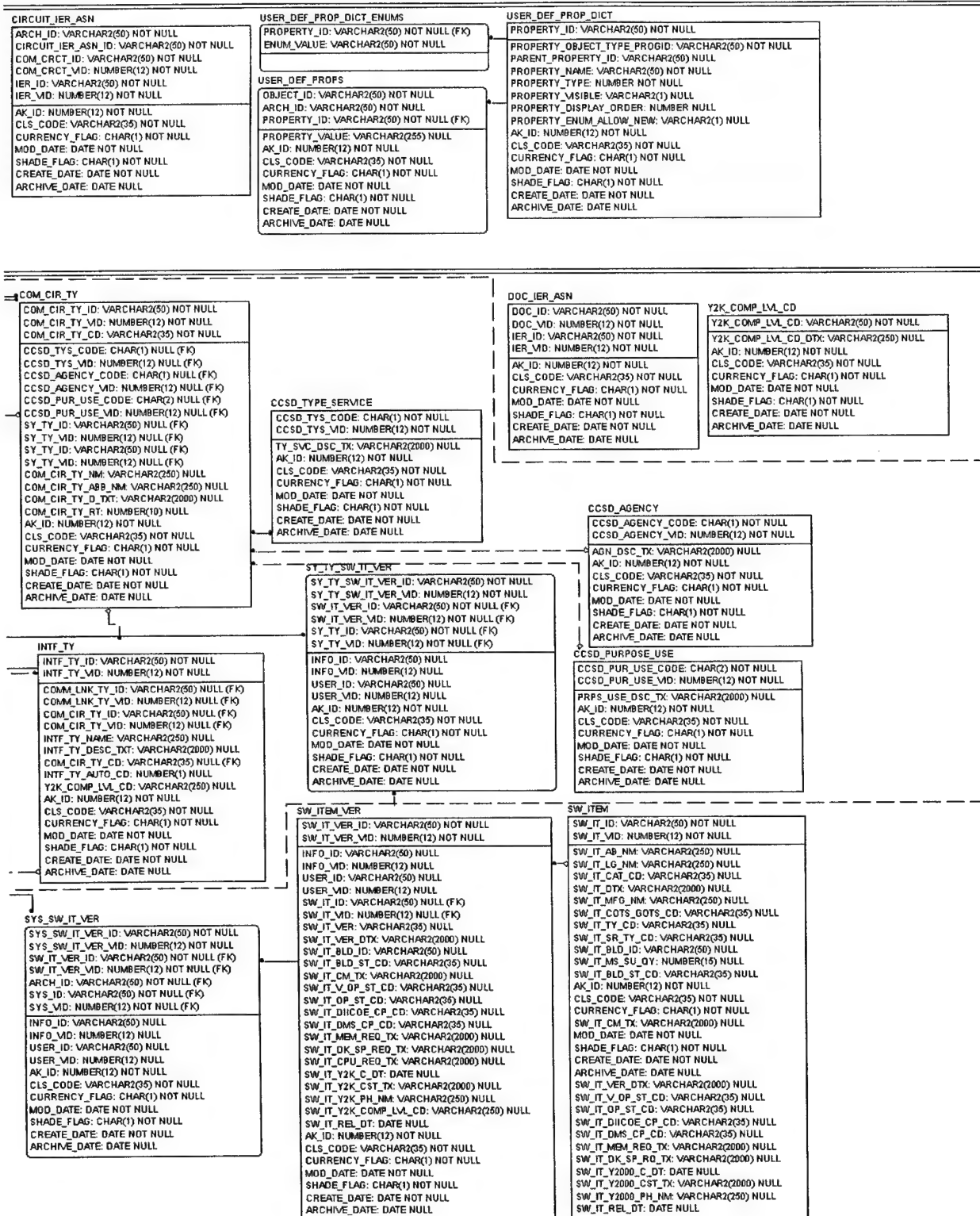
TASK_MSSION_AREA

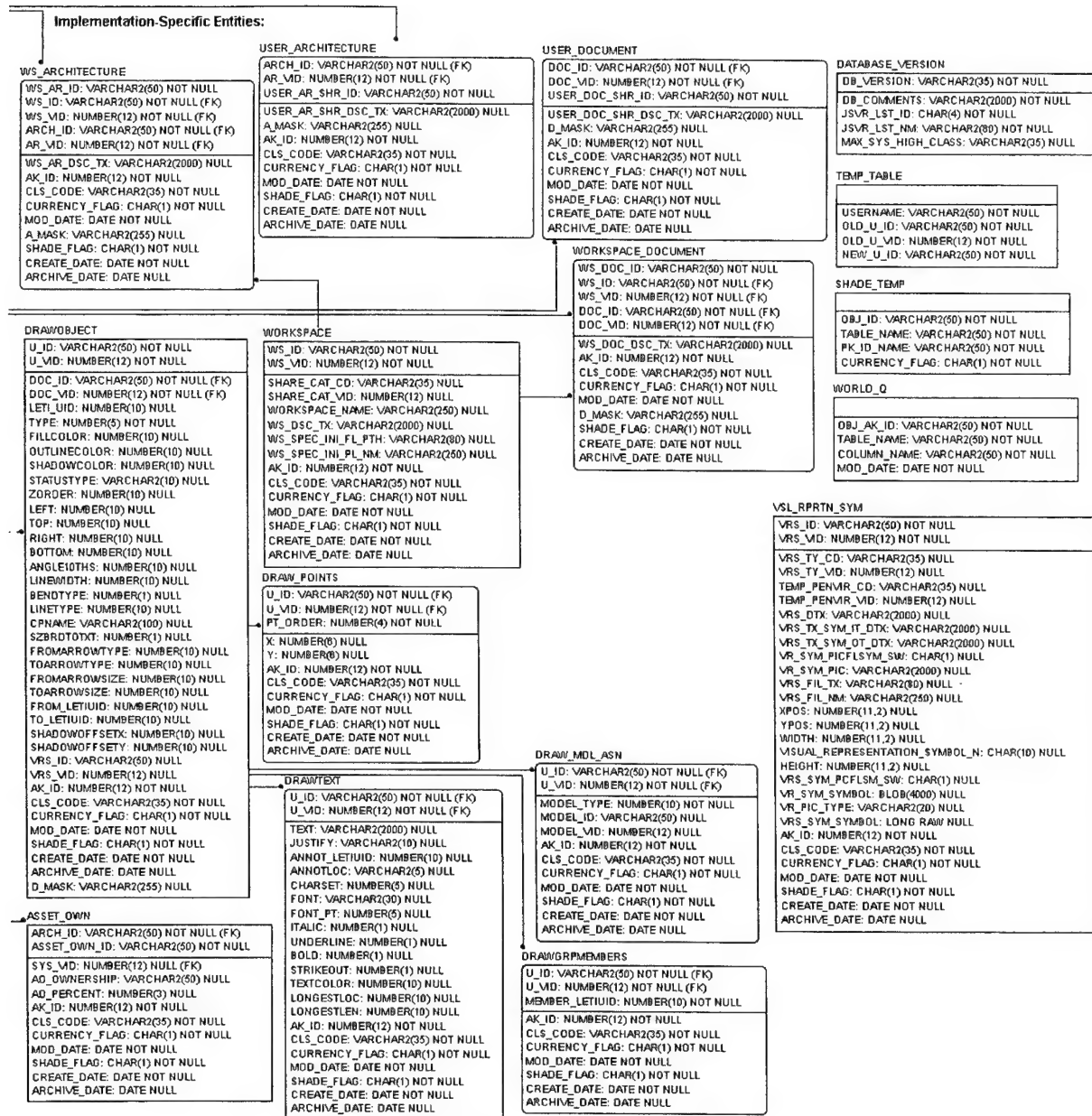
ARCH_ID: VARCHAR2(50) NOT NULL (FK)
 MSN_AR_TY_CD: VARCHAR2(35) NOT NULL (FK)
 MSN_AR_VID: NUMBER(12) NOT NULL (FK)

TASK_MSN_AR_DTX: VARCHAR2(2000) NULL
 AK_ID: NUMBER(12) NOT NULL
 CLS_CODE: VARCHAR2(35) NOT NULL
 CURRENCY_FLAG: CHAR(1) NOT NULL
 MOD_DATE: DATE NOT NULL
 SHADE_FLAG: CHAR(1) NOT NULL
 CREATE_DATE: DATE NOT NULL
 ARCHIVE_DATE: DATE NULL









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ANNEX B. JCAPS 2.1 ENTITY SPECIFICATIONS

Table B-1. Entity Specifications for User-Accessible Entities

Table B-2. Entity Specifications for Implementation-Unique Entities

Table B-3. Entity Specifications for Entities Not Yet Available to Users

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Table B-1. Entity Specifications for User-Accessible Entities

Entity Name	Entity Column Name	Entity Definition	Entity Type	Entity Note
ARCHITECTURE	ARCHITECTURE	THE STRUCTURE OF COMPONENTS, THEIR RELATIONSHIPS, AND THE PRINCIPLES AND GUIDELINES GOVERNING THEIR DESIGN AND EVOLUTION OVER TIME.	Independent	
ARCHITECTURE DOCUMENT	AR_DOCUMENT	AN ASSOCIATION OF AN ARCHITECTURE WITH A DOCUMENT.	Dependent	
ARM CODE	ARM_CODE	THE LIST OF AVAILABLE ARM CODES	Independent	
ASSET OWNERSHIP	ASSET_OWN	THE DESCRIPTION AND PERCENTAGE OF OWNERSHIP OF A SYSTEM	Independent	
COMMAND-CONTROL-ELEMENT	C2E	INTEGRATED SYSTEMS OF DOCTRINE, PROCEDURES, ORGANIZATIONAL STRUCTURES, PERSONNEL, EQUIPMENT, FACILITIES, AND COMMUNICATIONS DESIGNED TO SUPPORT A COMMANDER'S EXERCISE OF COMMAND AND CONTROL ACROSS THE RANGE OF MILITARY OPERATIONS. (DERIVED FROM THE DOD DICTIONARY)	Independent	JMTGM# 081-95
COMMAND-CONTROL-ELEMENT-ORGANIZATION	C2E_ORG	AN ASSOCIATION OF A COMMAND-CONTROL-ELEMENT WITH AN ORGANIZATION.	Dependent	
COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY	CCSD_AGENCY	THE AGENCY THAT SENDS OR RECEIVES ON A COMMAND AND CONTROL COMMUNICATIONS CIRCUIT.	Independent	
COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE	CCSD_PURPOSE_USE	THE PURPOSE, OR USE, OF A COMMAND AND CONTROL COMMUNICATIONS CIRCUIT.	Independent	
COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE	CCSD_TYPE_SERVICE	A KIND OF SERVICE PROVIDED BY A COMMAND AND CONTROL COMMUNICATIONS CIRCUIT.	Independent	
COMMUNICATION LINK TYPE	COMM_LNK_TY	THE GENERIC TYPES OF COMMUNICATION LINKS	Independent	
COMMUNICATION-CHANNEL	COM_CHANNEL	A LOGICAL PARTITION OF A PHYSICAL DEVICE OVER WHICH COMMUNICATIONS ARE CONVEYED.	Independent	
COMMUNICATION-CIRCUIT	COM_CRCT	A CIRCUIT USED FOR COMMUNICATIONS.	Independent	
COMMUNICATION-CIRCUIT-TYPE	COM_CIR_TY	A KIND OF LOGICAL CIRCUIT FOR COMMUNICATIONS.	Independent	
COMMUNICATION-LINK	COMMUNICATION_LINK	A CONNECTION BETWEEN TWO COMMUNICATIONS NODES.	Dependent	
COST MANAGEMENT	COST_MAN	THE DOLLAR AMOUNTS ASSOCIATED WITH VARIOUS ASPECTS OF THE MANAGEMENT OF A SYSTEM BY TIME PERIOD	Independent	
COUNTRY DOCUMENT	COUNTRY DOCUMENT	(39) (A) A NATION OF THE WORLD.	Independent	
ECHELON	ECHELON	(119/1) (A) RECORDED INFORMATION REGARDLESS OF PHYSICAL FORM. A SUBDIVISION OF A HEADQUARTERS OR A SEPARATE LEVEL OF COMMAND.	Independent	(PCAT Version 2.1 (122) (D))

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Entity Name	Entity Column Name	Entity Definition	Entity Type	Entity Note
INFORMATION-EXCHANGE-REQUIREMENT	IER	A REQUIREMENT FOR THE CONTENT OF AN INFORMATION FLOW.	Independent	
INTERFACE	INTF	A GENERIC CONNECTION BETWEEN C2E'S (OPFAC'S) OR SYSTEMS	Independent	
INTERFACE TYPE	INTF_TY	THE GENERIC TYPES OF INTERFACES	Independent	
MESSAGE	MESSAGE	A COMMUNICATION TRANSMITTED BY SPOKEN OR WRITTEN WORDS, SIGNALS, OR OTHER MEANS FROM ONE PERSON OR GROUP TO ANOTHER.	Independent	
ORGANIZATION	ORGANIZATION	(345)(A) AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	Independent	
PROCESS-ACTIVITY	PROCESS_ACTIVITY	(4204) (A) THE REPRESENTATION OF A MEANS BY WHICH A PROCESS ACTS ON SOME INPUT TO PRODUCE A SPECIFIC OUTPUT.	Independent	
SERVICE CODE	SERVICE_CODE	THE LIST OF AVAILABLE SERVICE CODES	Independent	
SOFTWARE ITEM	SW_ITEM_VER	A SPECIFIC VERSION OF SOFTWARE	Independent	
SOFTWARE-ITEM	SW_ITEM	A SET OF INSTRUCTIONS THAT GOVERN THE OPERATION OF DATA PROCESSING EQUIPMENT.	Independent	
SYSTEM	SYSTEM	(326) (D) AN ORGANIZED ASSEMBLY OF INTERACTIVE COMPONENTS AND PROCEDURES FORMING A UNIT.	Independent	
SYSTEM CATEGORY	SYS_CAT	THE LISTING AND HIERARCHY OF AVAILABLE SYSTEM CATEGORIES AND SUBCATEGORIES	Independent	
SYSTEM SOFTWARE	SYS_SW_IT_VER	THE RELATIONSHIP BETWEEN SYSTEM AND SOFTWARE ITEM VERSION	Dependent	
SYSTEM TRANSMISSION INFO	SY_XM_INFO	THE TRANSMISSION INFORMATION ASSOCIATED WITH A SPECIFIC SYSTEM	Dependent	
SYSTEM-ASSOCIATION	SYSTEM_ASN	AN ASSOCIATION OF A SYSTEM WITH ANOTHER SYSTEM. (PROPOSED REPLACEMENT FOR: SYSTEM-ASSOCIATION--(12546/1) (D) AN ASSOCIATION BETWEEN A SYSTEM AND ANOTHER SYSTEM INDICATING CONNECTIVITY BETWEEN THE SYSTEMS.)	Dependent	
SYSTEM-TYPE	SYSTEM_TYPE	(9083) (D) A CATEGORY OF SYSTEM.	Independent	
UNIVERSAL-JOINT-TASK-LIST-TASK	UJTL_TASK	A SPECIFIC TASK IN THE UNIVERSAL JOINT TASK LIST.	Independent	
USER CODE	USER_CD	THE LIST OF AVAILABLE USER CODES	Independent	
USER_DEF_PROP_DIC	USER_DEF_PROP_DIC_T		Independent	
USER_DEF_PROP_DIC T_ENUMS	USER_DEF_PROP_DIC T_ENUMS		Dependent	
USER_DEF_PROPS	USER_DEF_PROPS		Dependent	

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Table B-2. Entity Specifications for Implementation-Unique Entities

Entity Name	Entity Column Name	Entity Definition	Entity Type	Entity Note
DATABASE_VERSION	DATABASE_VERSION	JCAPS INTERNAL DATABASE IDENTIFIER	Independent	
DOCUMENT MODEL OBJECT ASSOCIATION	DOC_MDL_ASN	THE RELATIONSHIP BETWEEN A DOCUMENT (AFV2 PRODUCT) AND ITS MODEL OBJECTS (AFV2 COMPONENTS)	Dependent	
DRAW POINTS	DRAW_POINTS	A JCAPS SPECIFIC DRAW OBJECT TABLE FOR REPRESENTING POINTS	Dependent	
DRAW-MODEL OBJECT ASSOCIATION	DRAW_MDL_ASN	THE RELATIONSHIP BETWEEN A MODEL OBJECT (AFV2 COMPONENT) AND ITS JCAPS SPECIFIC GRAPHICAL REPRESENTATION INFORMATION	Dependent	
DRAWGRPMEMBERS	DRAWGRPMEMBERS	A DRAW-OBJECTS TABLE FOR DRAWING THE MEMBERS OF A GROUP.	Dependent	
DRAWOBJECT	DRAWOBJECT	A JCAPS SPECIFIC DRAW-OBJECTS TABLE.	Independent	
DRAWTEXT	DRAWTEXT	A JCAPS SPECIFIC DRAW-OBJECTS TABLE FOR REPRESENTING TEXT.	Dependent	
QUERIES	QUERIES	JCAPS SPECIFIC USER DEFINED QUERIES	Independent	
QUERY ENTRIES	QUERY_ENTRIES	JCAPS SPECIFIC USER DEFINED QUERIES	Independent	
RELATIONSHIP_ASN	RELATIONSHIP_ASN	A DRAW-OBJECT TABLE FOR BUILDING RELATIONSHIPS BETWEEN ORGANIZATIONS AND UNITS.	Independent	
REPORT_FIELDS	REPORT_FIELDS		Independent	
REPORTS	REPORTS		Independent	
SHADE_TEMP	SHADE_TEMP		Independent	
TEMP_TABLE	TEMP_TABLE		Independent	
USER-PREFERENCE-ARCHITECTURE-	USER_ARCHITECTURE	AN ASSOCIATION OF A USER-PREFERENCE WITH AN ARCHITECTURE.	Dependent	
SHARE-PERMISSION				
USER-PREFERENCE-DOCUMENT-SHARE-PERMISSION	USER_DOCUMENT	AN ASSOCIATION OF A USER-PREFERENCE WITH A DOCUMENT.	Dependent	
VISUAL-REPRESENTATION-SYMBOL	VSL_RPRTN_SYM	A SYMBOL THAT IS USED TO REPRESENT SOMETHING VISUALLY.	Independent	
WORKSPACE	WORKSPACE	AN ENVIRONMENT IN WHICH WORK IS PERFORMED.	Independent	
WORKSPACE-ARCHITECTURE	WS_ARCHITECTURE	AN ASSOCIATION OF A WORKSPACE WITH AN ARCHITECTURE.	Dependent	
WORKSPACE-DOCUMENT	WORKSPACE_DOCUME NT	AN ASSOCIATION OF A WORKSPACE WITH A DOCUMENT.	Dependent	
WORLD_Q	WORLD_Q		Independent	

Table B-3. Entity Specifications for Entities Not Yet Available to Users

Entity Name	Entity Column Name	Entity Definition	Entity Type	Entity Note
CIRCUIT-IER ASSOCIATION	CIRCUIT_IER_ASN	THE RELATIONSHIP BETWEEN CIRCUIT AND INFORMATION EXCHANGE REQUIREMENT	Independent	
COMMUNICATION-MEDIUM	COM_MED	SPECIFICATION OF COMMUNICATIONS MEDIA USED TO CONNECT NODES.	Independent	
DATA-ITEM	DATA_ITEM	A MATERIEL-ITEM REPRESENTING AN INSTANCE OF INFORMATION.	Independent	
DATA-ITEM-TYPE	DATA_ITEM_TYPE	A CLASS OF INFORMATION ABOUT A DATA-ITEM.	Independent	
DOCUMENT-IER ASSOCIATION	DOC_IER_ASN	THE RELATIONSHIP BETWEEN A DOCUMENT (AFV2 PRODUCT) AND AN IER	Independent	

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Entity Name	Entity Column Name	Entity Definition	Entity Type	Entity Note
EXCHANGE-NEED-LINE-REQUIREMENT	EXCN_ND_LN_REQMT	A REQUIREMENT THAT IS THE LOGICAL EXPRESSION OF THE NEED TO TRANSFER INFORMATION (WHOSE CONTENT IS SPECIFIED BY REFERENCE TO INFORMATION-EXCHANGE-REQUIREMENT) AMONG OPERATIONAL ELEMENTS (ORGANIZATIONS OR ORGANIZATION-TYPES) THAT REFERENCES RELATED TASKS, THE PROVIDING NODE/OPERATIONAL ELEMENT, AND THE RECEIVING NODE/OPERATIONAL ELEMENT.	Independent	
FUNCTION	FUNCTION	THE SPECIFICATION OF HOW INFORMATION OBJECTS ARE SYNTHESIZED TO SUPPORT THE AUTOMATION OF AN ACTIVITY OR EXCHANGE REQUIREMENT.	Independent	
FUNCTIONAL-AREA	FUNCTIONAL_AREA	(4198) (A) A MAJOR AREA OF RELATED ACTIVITY.	Independent	
INTERFACE-IER ASSOCIATION	INTERFACE_IER_ASN	THE RELATIONSHIP BETWEEN AN INTERFACE AND INFORMATION EXCHANGE REQUIREMENT	Independent	
LINK-IER ASSOCIATION	LINK_IER_ASN	THE RELATIONSHIP BETWEEN LINKS AND INFORMATION EXCHANGE REQUIREMENTS	Independent	
MISSION-AREA	MISSION_AREA	(2305) (A) THE GENERAL CLASS TO WHICH AN OPERATIONAL MISSION BELONGS.	Independent	
MISSION-AREA-FUNCTIONAL-AREA	MS_AR_F_AR	AN ASSOCIATION OF A MISSION-AREA WITH A FUNCTIONAL-AREA.	Dependent	THE TERM MISSION FUNCTION AREA IS BASED ON THE SERIES OF JIEO FUNCTIONAL C3 INTEROPERABILITY ARCHITECTURES (FIAs). FOR EXAMPLE, JIEO REPORT 8302, DATED 13 JULY 1992, ENTITLED C3 ARCHITECTURE FOR JTF HEADQUARTERS. THE FUNCTION AREAS DESCRIBED IN THESE FIA DOCUMENTS ROUGHLY CORRESPOND TO THE MISSION ELEMENTS DESCRIBED IN THE OUTDATED MEMORANDUM OF POLICY - 50 (MOP-50).
SYSTEM IEM	SYS_IEM	THE RELATIONSHIP BETWEEN SYSTEM AND INFORMATION EXCHANGE MATRIX	Independent	
SYSTEM TYPE ASSOCIATION	SYSTEM_TY_ASN	THE RELATIONSHIPS BETWEEN TYPE OF SYSTEMS	Dependent	
SYSTEM TYPE TRANSMISSION INFO	SY_TY_XM_INFO	THE TRANSMISSION INFORMATION ASSOCIATED WITH A SYSTEM TYPE	Dependent	
SYSTEM TYPE-INTERFACE TYPE	SY_TY_INTF_TY	THE RELATIONSHIP BETWEEN SYSTEM TYPES AND INTERFACE TYPES	Dependent	
SYSTEM TYPE-SOFTWARE ITEM VERSION	SY_TY_SW_IT_VER	THE RELATIONSHIP BETWEEN SYSTEM TYPE AND SOFTWARE ITEM VERSION	Dependent	
TASK-MISSION-AREA	TASK_MISSION_AREA	AN ASSOCIATION OF A TASK WITH A MISSION-AREA.	Dependent	
Y2K COMPLIANCE LEVEL CODE	Y2K_COMP_LVL_CD	THE CODE WHICH REPRESENT THE LEVEL OF Y2K COMPLIANCE OF A SYSTEM	Independent	

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ANNEX C. JCAPS 2.1 RELATIONSHIP SPECIFICATIONS

Annex C

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JCAPS 2.1 Relationship Specifications

Table C-1. JCAPS 2.1 RELATIONSHIP SPECIFICATIONS

Parent Entity	Verb Phrase	Child Entity	Cardinality	Null Option	Type
ARCHITECTURE	is associated with	ARCHITECTURE DOCUMENT	One-to-Zero-One-or-More		Identifying
ARCHITECTURE	is associated with	USER-PREFERENCE-ARCHITECTURE-SHARE-PERMISSION	One-to-Zero-One-or-More		Identifying
ARCHITECTURE	is associated with	WORKSPACE-ARCHITECTURE	One-to-Zero-One-or-More		Identifying
ARM CODE	T583_FK	ORGANIZATION	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMAND-CONTROL-ELEMENT	may have	COMMAND-CONTROL-ELEMENT-ORGANIZATION	One-to-Zero-One-or-More		Identifying
COMMAND-CONTROL-ELEMENT	T56_FK	COMMUNICATION-CIRCUIT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMAND-CONTROL-ELEMENT	T57_FK	COMMUNICATION-CIRCUIT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMAND-CONTROL-ELEMENT	T108_FK	COMMUNICATION-LINK	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMAND-CONTROL-ELEMENT	T109_FK	COMMUNICATION-LINK	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMAND-CONTROL-ELEMENT	T74_FK	EXCHANGE-NEED-LINE-REQUIREMENT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMAND-CONTROL-ELEMENT	T75_FK	EXCHANGE-NEED-LINE-REQUIREMENT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMAND-CONTROL-ELEMENT	T90_FK	INFORMATION-EXCHANGE-REQUIREMENT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMAND-CONTROL-ELEMENT	T91_FK	INFORMATION-EXCHANGE-REQUIREMENT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMAND-CONTROL-ELEMENT	T128_FK	INTERFACE	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMAND-CONTROL-ELEMENT	T129_FK	INTERFACE	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMAND-CONTROL-ELEMENT	T387_FK	SYSTEM	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY	T48_FK	COMMUNICATION-CIRCUIT-TYPE	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE	T49_FK	COMMUNICATION-CIRCUIT-TYPE	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE	T47_FK	COMMUNICATION-CIRCUIT-TYPE	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMUNICATION LINK TYPE	T105_FK	COMMUNICATION-LINK	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMUNICATION LINK TYPE	T131_FK	INTERFACE TYPE	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMUNICATION-CIRCUIT	T41_FK	COMMUNICATION-CHANNEL	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMUNICATION-CIRCUIT-TYPE	R/4673	COMMUNICATION-CIRCUIT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMUNICATION-CIRCUIT-TYPE	T132_FK	INTERFACE TYPE	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMUNICATION-LINK	T42_FK	COMMUNICATION-CHANNEL	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMUNICATION-LINK	T43_FK	COMMUNICATION-CHANNEL	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMUNICATION-MEDIUM	is the medium for	INFORMATION-EXCHANGE-REQUIREMENT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMUNICATION-MEDIUM	T173_FK	SYSTEM IEM	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COMMUNICATION-MEDIUM	T174_FK	SYSTEM IEM	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
COUNTRY	is the country of origin for	ORGANIZATION	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
DATA-ITEM	T169_FK	SYSTEM IEM	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
DATA-ITEM	T170_FK	SYSTEM IEM	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
DATA-ITEM-TYPE	is the type of	DATA-ITEM	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying

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Parent Entity	Verb Phrase	Child Entity	Cardinality	Null Option	Type
DATA-ITEM-TYPE	T124_FK	DATA-ITEM	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
DATA-ITEM-TYPE	T167_FK	SYSTEM IEM	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
DATA-ITEM-TYPE	T168_FK	SYSTEM IEM	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
DOCUMENT	is associated with	ARCHITECTURE DOCUMENT	One-to-Zero-One-or-More		Identifying
DOCUMENT	T250_FK	DOCUMENT MODEL OBJECT ASSOCIATION	One-to-Zero-One-or-More		Identifying
DOCUMENT	T39_FK	DRAWOBJECT	One-to-Zero-One-or-More	No Nulls	Non-identifying
DOCUMENT	is associated with	USER-PREFERENCE-DOCUMENT-SHARE-PERMISSION	One-to-Zero-One-or-More		Identifying
DOCUMENT	is associated with	WORKSPACE-DOCUMENT	One-to-Zero-One-or-More		Identifying
DRAWOBJECT	T36_FK	DRAW POINTS	One-to-Zero-One-or-More		Identifying
DRAWOBJECT	T50_FK	DRAWGRPMEMBERS	One-to-Zero-One-or-More		Identifying
DRAWOBJECT	T35_FK	DRAW-MODEL OBJECT ASSOCIATION	One-to-Zero-One-or-More		Identifying
DRAWOBJECT	T61_FK	DRAWTEXT	One-to-Zero-One-or-More		Identifying
ECHOLON	may be the echelon of	COMMAND-CONTROL-ELEMENT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
ECHOLON	may be the echelon of	ORGANIZATION	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
FUNCTION	T175_FK	SYSTEM IEM	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
FUNCTIONAL-AREA	may be supported by	FUNCTION	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
FUNCTIONAL-AREA	T323_FK	INFORMATION-EXCHANGE-REQUIREMENT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
FUNCTIONAL-AREA	may be associated with	MISSION-AREA-FUNCTIONAL-AREA	One-to-Zero-One-or-More		Identifying
FUNCTIONAL-AREA	T307_FK	MISSION-AREA-FUNCTIONAL-AREA	One-to-Zero-One-or-More		Identifying
INFORMATION-EXCHANGE-REQUIREMENT	T251_FK	DOCUMENT MODEL OBJECT ASSOCIATION	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
INTERFACE	T205_FK	SYSTEM IEM	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
INTERFACE TYPE	T130_FK	INTERFACE	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
INTERFACE TYPE	T154_FK	SYSTEM TYPE-INTERFACE TYPE	One-to-Zero-One-or-More		Identifying
MESSAGE	T79_FK	INFORMATION-EXCHANGE-REQUIREMENT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
MESSAGE	T157_FK	SYSTEM IEM	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
MESSAGE	T165_FK	SYSTEM IEM	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
MISSION-AREA	T324_FK	INFORMATION-EXCHANGE-REQUIREMENT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
MISSION-AREA	may be associated with	MISSION-AREA-FUNCTIONAL-AREA	One-to-Zero-One-or-More		Identifying
MISSION-AREA	T306_FK	MISSION-AREA-FUNCTIONAL-AREA	One-to-Zero-One-or-More		Identifying
MISSION-AREA	may be associated with	TASK-MISSION-AREA	One-to-Zero-One-or-More		Identifying
MISSION-AREA	T308_FK	TASK-MISSION-AREA	One-to-Zero-One-or-More		Identifying
MISSION-AREA ORGANIZATION	may have	COMMAND-CONTROL-ELEMENT-ORGANIZATION	One-to-Zero-One-or-More		Identifying
ORGANIZATION	T72_FK	EXCHANGE-NEED-LINE-REQUIREMENT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
ORGANIZATION	T73_FK	EXCHANGE-NEED-LINE-REQUIREMENT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying

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JCAPS 2.1 Relationship Specifications

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Parent Entity	Verb Phrase	Child Entity	Cardinality	Null Option	Type
ORGANIZATION	T305_FK	FUNCTIONAL-AREA	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
	T87_FK	INFORMATION-EXCHANGE-REQUIREMENT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
ORGANIZATION	T88_FK	INFORMATION-EXCHANGE-REQUIREMENT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
	T102_FK	RELATIONSHIP ASN	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
ORGANIZATION	T401_FK	RELATIONSHIP ASN	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
	T900_FK	ARCHITECTURE	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
PROCESS-ACTIVITY	T92_FK	INFORMATION-EXCHANGE-REQUIREMENT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
	T93_FK	INFORMATION-EXCHANGE-REQUIREMENT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
REPORTS	T700_FK	REPORT_FIELDS	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
	T584_FK	ORGANIZATION	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
SOFTWARE CODE	T454_FK	SYSTEM SOFTWARE ITEM VERSION	One-to-Zero-One-or-More		Identifying
	T456_FK	SYSTEM TYPE-SOFTWARE ITEM VERSION	One-to-Zero-One-or-More		Identifying
SOFTWARE-ITEM	T196_FK	SOFTWARE ITEM VERSION	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
	T600_FK	ASSET OWNERSHIP	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
SYSTEM	T61_FK	COMMUNICATION-CIRCUIT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
	T62_FK	COMMUNICATION-CIRCUIT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
SYSTEM	T114_FK	COMMUNICATION-LINK	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
	T115_FK	COMMUNICATION-LINK	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
SYSTEM	T601_FK	COST MANAGEMENT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
	T126_FK	INTERFACE	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
SYSTEM	T127_FK	INTERFACE	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
	T176_FK	SYSTEM IEM	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
SYSTEM	T177_FK	SYSTEM IEM	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
	T455_FK	SYSTEM SOFTWARE ITEM VERSION	One-to-Zero-One-or-More		Identifying
SYSTEM	T413_FK	SYSTEM TRANSMISSION INFO	One-to-Zero-One-or-More		Identifying
	T193_FK	SYSTEM-ASSOCIATION	One-to-Zero-One-or-More		Identifying
SYSTEM	T194_FK	SYSTEM-ASSOCIATION	One-to-Zero-One-or-More		Identifying
	T197_FK	SYSTEM-TYPE	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
SYSTEM CATEGORY	T103_FK	COMMUNICATION LINK TYPE	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
	T104_FK	COMMUNICATION LINK TYPE	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
SYSTEM-TYPE	T50_FK	COMMUNICATION-CIRCUIT-TYPE	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
	T51_FK	COMMUNICATION-CIRCUIT-TYPE	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
SYSTEM-TYPE	is the type of	SYSTEM	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
	T393_FK	SYSTEM TYPE ASSOCIATION	One-to-Zero-One-or-More		Identifying
SYSTEM-TYPE	T395_FK	SYSTEM TYPE ASSOCIATION	One-to-Zero-One-or-More		Identifying
	T412_FK	SYSTEM TYPE TRANSMISSION INFO	One-to-Zero-One-or-More		Identifying
SYSTEM-TYPE	T155_FK	SYSTEM TYPE-INTERFACE TYPE	One-to-Zero-One-or-More		Identifying
	T457_FK	SYSTEM TYPE-SOFTWARE ITEM VERSION	One-to-Zero-One-or-More		Identifying
UNIVERSAL-JOINT-TASK-LIST-TASK	T226_FK	PROCESS-ACTIVITY	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying

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Parent Entity	Verb Phrase	Child Entity	Cardinality	Null Option	Type
USER CODE	T291_FK	COMMAND-CONTROL-ELEMENT	Zero-or-One-to-Zero-One-or-More	Nulls Allowed	Non-identifying
USER_DEF_PROP_DICT	T702_FK	USER_DEF_PROP_DICT_ENUMS	One-to-Zero-One-or-More		Identifying
USER_DEF_PROP_DICT	T701_FK	USER_DEF_PROPS	One-to-Zero-One-or-More		Identifying
WORKSPACE	is associated with	WORKSPACE-ARCHITECTURE	One-to-Zero-One-or-More		Identifying
WORKSPACE	is associated with	WORKSPACE-DOCUMENT	One-to-Zero-One-or-More		Identifying

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ANNEX D. JCAPS 2.1 ATTRIBUTE SPECIFICATIONS

Table D-1. Attribute Specifications for User-Accessible Entities

Table D-2. Attribute Specifications for Implementation-Unique Entities

Table D-3. Attribute Specifications for Entities Not Yet Available to Users

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Annex D

JCAPS 2.1 Attribute Specifications

Table D-1. Attribute Specifications for User-Accessible Entities

Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
ARCHITECTURE	AR_CLSN_CD		String	VARCHAR 2(35)	NULL	No	No		
ARCHITECTURE	ARCHITECT NAME		String	VARCHAR 2(250)	NULL	No	No	NAME OF THE ARCHITECT	
ARCHITECTURE	ARCHITECTURE DESCRIPTION TEXT		String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES AN ARCHITECTURE.	
ARCHITECTURE	OBJECTIVE TEXT		String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES THE AIM OF AN ARCHITECTURE.	
ARCHITECTURE	ARCHITECTURE PURPOSE		String	VARCHAR 2(2000)	NULL	No	No	THE CONSTRAINTS GIVEN FOR THIS ARCHITECTURE'S PURPOSE	
ARCHITECTURE	ARCHITECTURE SCOPE TEXT		String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES THE EXTENT OF APPLICABILITY FOR AN ARCHITECTURE.	
ARCHITECTURE	ARCHITECTURE SPECIFIC INITIALIZATION FILE PATH TEXT		String	VARCHAR 2(80)	NULL	No	No	THE TEXT THAT DESCRIBES THE LOCATION OF A FILE THAT CONTAINS ARCHITECTURE ENVIRONMENTAL PARAMETERS.	
ARCHITECTURE	ARCHITECTURE VIEW TYPE CODE		String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT DENOTES A SPECIFIC VIEW OF AN ARCHITECTURE.	Operation Architecture View; System Architecture View; Technical Architecture View; Combination of two or more views; Other; Not Known; Not Specified. See C4ISR Architecture Framework.
ARCHITECTURE	ASSOCIATED FILE NAME		String	VARCHAR 2(250)	NULL	No	No	NAME OF FILE ASSOCIATED WITH THE ARCHITECTURE	
ARCHITECTURE	CONTROL NUMBER		String	VARCHAR 2(35)	NULL	No	No	THE ARCHITECTURE'S CONTROL NUMBER	
ARCHITECTURE	PROCESS ACTIVITY IDENTIFIER		String	VARCHAR 2(50)	NULL	No	Yes	THE IDENTIFIER OF THE ACTIVITY ASSOCIATED WITH THE ARCHITECTURE	
ARCHITECTURE	SECTION IDENTIFIER		String	VARCHAR 2(35)	NULL	No	No	THE ARCHITECTURE'S SECTION IDENTIFIER	
ARCHITECTURE	SHARE CATEGORY CODE		String	VARCHAR 2(35)	NULL	No	No	CODE WHICH DENOTES THE SHARE CATEGORY OF THE ARCHITECTURE	
ARCHITECTURE	STATUS		String	VARCHAR 2(250)	NULL	No	No	THE CURRENT STATUS OF THE ARCHITECTURE	
ARCHITECTURE	SUMMARY DESCRIPTION TEXT		String	VARCHAR 2(2000)	NULL	No	No	TEXT WHICH DESCRIBES THE ARCHITECTURE	
ARCHITECTURE	AK_ID		Number	NUMBER(12)	NOT NULL	No	No		
ARCHITECTURE	AR_VID		Number	NUMBER(12)	NOT NULL	Yes	No		
ARCHITECTURE	ARCH_ID		String	VARCHAR 2(50)	NOT NULL	Yes	Yes		
ARCHITECTURE	ARCHIVE_DATE		Date	DATE	NULL	No	No		
ARCHITECTURE	CLS_CODE		String	VARCHAR 2(35)	NOT NULL	No	No		
ARCHITECTURE	CREATE_DATE		Date	DATE	NOT NULL	No	No		
ARCHITECTURE	CURRENCY_FLAG		String	CHAR(1)	NOT NULL	No	No		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
ARCHITECTURE		MOD_DAT E	Date time	DATE	NOT NULL	No	No		
ARCHITECTURE		PRCS_ACT Y_VID	Numb er	NUMBER(12)	NULL	No	Yes		
ARCHITECTURE		SHADE_FL AG	String	CHAR(3)	NOT NULL	No	No		
ARCHITECTURE		SHARE_CA T_VID	Numb er	NUMBER(12)	NULL	No	No		
ARCHITECTURE DOCUMENT	ARCHITECTURE- DOCUMENT DESCRIPTION TEXT	AR_DOC_D TX	String	VARCHAR 2(2000)	NULL	No	No	THE FREEFORM NARRATIVE THAT CHARACTERIZES AN ARCHITECTURE-DOCUMENT.	
ARCHITECTURE DOCUMENT	ARCHITECTURE- DOCUMENT IDENTIFIER	AR_DOC_I D	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS AN ARCHITECTURE- DOCUMENT.	
ARCHITECTURE DOCUMENT	ARCHITECTURE- DOCUMENT ROLE CODE	AR_DOC_R OL_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT REPRESENTS THE CLASS OF RELATIONSHIP THAT A DOCUMENT HAS FOR AN ARCHITECTURE.	Is described in; Is promulgated by; Cites; Has a product in the form of
ARCHITECTURE DOCUMENT	DOCUMENT IDENTIFIER	DOC_ID	String	VARCHAR 2(50)	NOT NULL	Yes	Yes	THE IDENTIFIER THAT REPRESENTS A DOCUMENT	
ARCHITECTURE DOCUMENT		AK_ID	Numb er	NUMBER(12)	NOT NULL	No	No		
ARCHITECTURE DOCUMENT		AR_VID	Numb er	NUMBER(12)	NOT NULL	Yes	Yes		
ARCHITECTURE DOCUMENT		ARCH_ID	String	VARCHA R2(50)	NOT NULL	Yes	Yes		
ARCHITECTURE DOCUMENT		ARCHIVE_ DATE	Date time	DATE	NULL	No	No		
ARCHITECTURE DOCUMENT		CLS_CODE	String	VARCHA R2(35)	NOT NULL	No	No		
ARCHITECTURE DOCUMENT		CREATE_D ATE	Date time	DATE	NOT NULL	No	No		
ARCHITECTURE DOCUMENT		CURRENC Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
ARCHITECTURE DOCUMENT		DOC_VID	Numb er	NUMBER(12)	NOT NULL	Yes	Yes		
ARCHITECTURE DOCUMENT		MOD_DAT E	Date time	DATE	NOT NULL	No	No		
ARCHITECTURE DOCUMENT		SHADE_FL AG	String	CHAR(1)	NOT NULL	No	No		
ARCHITECTURE DOCUMENT	ARM CODE DESCRIPTION TEXT	ARM_COD E_TXT	String	VARCHAR 2(250)	NULL	No	No	THE TEXT DESCRIPTION OF THE ARM CODE	
ARM CODE	ARM CODE IDENTIFIER	ARM_COD E_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS AN ARM CODE	
ARM CODE		AK_ID	Numb er	NUMBER(12)	NOT NULL	No	No		
ARM CODE		ARCHIVE_ DATE	Date time	DATE	NULL	No	No		
ARM CODE		CLS_CODE	String	VARCHA R2(35)	NOT NULL	No	No		
ARM CODE		CREATE_D ATE	Date time	DATE	NOT NULL	No	No		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
ARM CODE		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
ARM CODE		MOD_DATE	Date	DATE	NOT NULL	No	No		
ARM CODE		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
ASSET OWNERSHIP	ASSET_OWN_ID	ASSET_OWN_ID	String	VARCHAR(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS ASSET OWNERSHIP INFORMATION	
ASSET OWNERSHIP	OWNERSHIP TYPE	AO_OWNE_RSHIP	String	VARCHAR(50)	NULL	No	No	THE TYPE OF OWNERSHIP	
ASSET OWNERSHIP	PERCENT OWNERSHIP	AO_PERCENT	Number	NUMBER(3)	NULL	No	No	THE PERCENTAGE OF THE PARTICULAR TYPE OF OWNERSHIP	
ASSET OWNERSHIP		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
ASSET OWNERSHIP		ARCH_ID	String	VARCHAR(50)	NOT NULL	Yes	Yes		
ASSET OWNERSHIP		ARCHIVE_DATE	Date	DATE	NULL	No	No		
ASSET OWNERSHIP		CLS_CODE	String	VARCHAR(35)	NOT NULL	No	No		
ASSET OWNERSHIP		CREATE_DATE	Date	DATE	NOT NULL	No	No		
ASSET OWNERSHIP		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
ASSET OWNERSHIP		MOD_DATE	Date	DATE	NOT NULL	No	No		
ASSET OWNERSHIP		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
ASSET OWNERSHIP		SYS_VID	Number	NUMBER(12)	NULL	No	Yes		
COMMAND-CONTROL-ELEMENT	COMMAND-CONTROL-ELEMENT ABBREVIATION NAME	C2E_ABBV_NAME	String	VARCHAR(250)	NULL	No	No	THE ABBREVIATION FOR A COMMAND AND CONTROL ELEMENT'S NAME.	
COMMAND-CONTROL-ELEMENT	COMMAND-CONTROL-ELEMENT DESCRIPTION TEXT	C2E_DESC_TX	String	VARCHAR(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A COMMAND AND CONTROL ELEMENT.	
COMMAND-CONTROL-ELEMENT	COMMAND-CONTROL-ELEMENT GEOLOCATION LATITUDE	C2E_GEOC_LAT	Number	NUMBER(20,15)	NULL	No	No	THE LATITUDE OF A COMMAND AND CONTROL ELEMENT'S GEOGRAPHIC LOCATION	
COMMAND-CONTROL-ELEMENT	COMMAND-CONTROL-ELEMENT GEOLOCATION LONGITUDE	C2E_GEOC_LON	Number	NUMBER(20,15)	NULL	No	No	THE LONGITUDE OF A COMMAND AND CONTROL ELEMENT'S GEOLOCATION.	
COMMAND-CONTROL-ELEMENT	COMMAND-CONTROL-ELEMENT IDENTIFIER	C2E_ID	String	VARCHAR(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A COMMAND AND CONTROL ELEMENT.	
COMMAND-CONTROL-ELEMENT	COMMAND-CONTROL-ELEMENT LOCATION	C2E_LOCATION	String	VARCHAR(250)	NULL	No	No	THE LOCATION OF A COMMAND AND CONTROL ELEMENT	
COMMAND-CONTROL-ELEMENT	COMMAND-CONTROL-ELEMENT NAME	C2E_NM	String	VARCHAR(250)	NULL	No	No		
COMMAND-CONTROL-ELEMENT	COMMAND-CONTROL-ELEMENT NATION NAME	C2E_NTN_NAME	String	VARCHAR(250)	NULL	No	No	THE NAME OF THE NATION A COMMAND AND CONTROL ELEMENT SERVES.	

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
COMMAND-CONTROL-ELEMENT	ECHOLON IDENTIFIER	ECHOLON_ID	String	VARCHAR 2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE COMMAND AND CONTROL ELEMENT'S ECHOLON	
COMMAND-CONTROL-ELEMENT	USER CODE	USER_CD	String	CHAR(1)	NULL	No	Yes	THE USER CODE ASSOCIATED WITH THE COMMAND AND CONTROL ELEMENT	
COMMAND-CONTROL-ELEMENT		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
COMMAND-CONTROL-ELEMENT		ARCH_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No		
COMMAND-CONTROL-ELEMENT		ARCHIVE_DATE	Date	DATE	NULL	No	No		
COMMAND-CONTROL-ELEMENT		C2E_VID	Number	NUMBER	NOT NULL	Yes	No		
COMMAND-CONTROL-ELEMENT		CLS_CODE	String	VARCHAR 2(35)	NOT NULL	No	No		
COMMAND-CONTROL-ELEMENT		CREATE_DATE	Date	DATE	NOT NULL	No	No		
COMMAND-CONTROL-ELEMENT		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
COMMAND-CONTROL-ELEMENT		ECHOLON_VID	Number	NUMBER(12)	NULL	No	Yes		
COMMAND-CONTROL-ELEMENT		MOD_DATE	Date	DATE	NOT NULL	No	No		
COMMAND-CONTROL-ELEMENT		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
COMMAND-CONTROL-ELEMENT		USER_CD_VID	Number	NUMBER(12)	NULL	No	Yes		
COMMAND-CONTROL-ELEMENT	COMMAND-CONTROL-ELEMENT IDENTIFIER	C2E_ID	String	VARCHAR 2(50)	NOT NULL	Yes	Yes	THE IDENTIFIER THAT REPRESENTS A COMMAND AND CONTROL ELEMENT.	
COMMAND-CONTROL-ELEMENT-ORGANIZATION	COMMAND-CONTROL-ELEMENT-ORGANIZATION DESCRIPTION TEXT	C2E_ORG_DSC_TX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A COMMAND-CONTROL-ELEMENT-ORGANIZATION.	
COMMAND-CONTROL-ELEMENT-ORGANIZATION	COMMAND-CONTROL-ELEMENT-ORGANIZATION IDENTIFIER	C2E_ORG_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A COMMAND-CONTROL-ELEMENT-ORGANIZATION RELATIONSHIP	
COMMAND-CONTROL-ELEMENT-ORGANIZATION		ORG_ID	String	VARCHAR 2(50)	NOT NULL	Yes	Yes	(7875) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	
COMMAND-CONTROL-ELEMENT-ORGANIZATION		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
COMMAND-CONTROL-ELEMENT-ORGANIZATION		ARCH_ID	String	VARCHAR 2(50)	NOT NULL	Yes	Yes		
COMMAND-CONTROL-ELEMENT-ORGANIZATION		ARCHIVE_DATE	Date	DATE	NULL	No	No		
COMMAND-CONTROL-ELEMENT-ORGANIZATION		C2E_VID	Number	NUMBER	NOT NULL	Yes	Yes		

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Annex D (Table D-1, User Accessible Entities)

UNCLASSIFIED

JCAPS 2.1 Attribute Specifications

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
COMMAND-CONTROL-ELEMENT-ORGANIZATION		CLS_CODE	String	VARCHAR2(35)	NOT NULL	No	No		
COMMAND-CONTROL-ELEMENT-ORGANIZATION		CREATE_DATE	Date	DATE	NOT NULL	No	No		
COMMAND-CONTROL-ELEMENT-ORGANIZATION		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
COMMAND-CONTROL-ELEMENT-ORGANIZATION		MOD_DATE	Date	DATE	NOT NULL	No	No		
COMMAND-CONTROL-ELEMENT-ORGANIZATION		ORG_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
COMMAND-CONTROL-ELEMENT-ORGANIZATION		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY	COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY CODE	CCSD_AGENCY_CODE	String	CHAR(1)	NOT NULL	Yes	No	THE CODE THAT DENOTES A PARTICULAR AGENCY THAT IS REPRESENTED IN A COMMAND-CONTROL-SERVICE-DESIGNATOR.	
COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY	COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY DESCRIPTION TEXT	AGN_DSC_TX	String	VARCHAR2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A PARTICULAR AGENCY THAT IS REPRESENTED IN A COMMAND-CONTROL-SERVICE-DESIGNATOR.	1
COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY		ARCHIVE_DATE	Date	DATE	NULL	No	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY		CCSD_AGENCY_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY		CLS_CODE	String	VARCHAR2(35)	NOT NULL	No	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY		CREATE_DATE	Date	DATE	NOT NULL	No	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY		MOD_DATE	Date	DATE	NOT NULL	No	No		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY		SHADE_FL AG	String	CHAR(1)	NOT NULL	No	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE	COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE CODE	CCSD_PUR _USE_CODE	String	CHAR(2)	NOT NULL	Yes	No	THE CODE THAT DENOTES A KIND OF COMMAND-CONTROL-SERVICE-DESIGNATOR.	
COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE	COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE DESCRIPTION TEXT	PRPS_USE _DSC_TX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE.	
COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE		ARCHIVE_ DATE	Date	DATE	NULL	No	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE		CCSD_PUR _USE_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE		CLS_CODE	String	VARCHAR R2(35)	NOT NULL	No	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE		CREATE_D ATE	Date	DATE	NOT NULL	No	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE		CURRENT_ Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE		MOD_DAT E	Date	DATE	NOT NULL	No	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE		SHADE_FL AG	String	CHAR(1)	NOT NULL	No	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE	COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE CODE	CCSD_TYS _CODE	String	CHAR(1)	NOT NULL	Yes	No	THE CODE THAT DENOTES A KIND OF COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE.	
COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE	COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE DESCRIPTION TEXT	TY_SVC_D SC_TX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE.	

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Annex D (Table D-1, User Accessible Entities)

UNCLASSIFIED

JCAPS 2.1 Attribute Specifications

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Entity Name	Attribute Name	Col. Nm. AK_ID	Dom. Numb er	Datatype NUMBER(12)	Null NOT NULL	PK No	FK No	Attribute Definition	Note
COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE						No	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE	ARCHIVE_DATE		Date time	DATE	NULL	No	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE		CCSD_TYS_VID	Numb er	NUMBER(12)	NOT NULL	Yes	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE		CLS_CODE	String	VARCHAR R2(35)	NOT NULL	No	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE		CREATE_DATE	Date time	DATE	NOT NULL	No	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE		CURRENCY_FLAG	String	CHAR(1)	NOT NULL	No	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE		MOD_DATE	Date time	DATE	NOT NULL	No	No		
COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
COMMUNICATION LINK TYPE	COMMUNICATION LINK TYPE CODE	COMM_LN_K_TY_CD	String	VARCHAR 2(1)	NULL	No	No	THE CODE GIVEN TO THE COMMUNICATION LINK	
COMMUNICATION LINK TYPE	COMMUNICATION LINK TYPE DESCRIPTION TEXT	COMM_LN_K_TY_D_T XT	String	VARCHAR 2(2000)	NULL	No	No	TEXT DESCRIBING THE COMMUNICATION LINK TYPE	
COMMUNICATION LINK TYPE	COMMUNICATION LINK TYPE IDENTIFIER	COMM_LN_K_TY_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION LINK TYPE	
COMMUNICATION LINK TYPE	COMMUNICATION LINK TYPE NAME	COMM_LN_K_TY_NAM E	String	VARCHAR 2(250)	NULL	No	No	THE NAME OF THE COMMUNICATION LINK	
COMMUNICATION LINK TYPE	COMMUNICATION LINK TYPE NUMBER OF CHANNELS	COMM_LN_K_TY_NBR _CH	Numb er	NUMBER(4)	NULL	No	No	THE NUMBER OF CHANNELS ON THE COMMUNICATION LINK TYPE	
COMMUNICATION LINK TYPE	COMMUNICATION LINK TYPE RATE	COMM_LN_K_TY_RAT E	Numb er	NUMBER(10)	NULL	No	No	THE DATA RATE OF THE COMMUNICATION LINK	
COMMUNICATION LINK TYPE	FROM SYSTEM TYPE IDENTIFIER	SY_TY_ID	String	VARCHAR 2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE RECEIVING SYSTEM TYPE	
COMMUNICATION LINK TYPE	TO SYSTEM TYPE IDENTIFIER	SY_TY_ID	String	VARCHAR 2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE SENDING SYSTEM TYPE	
COMMUNICATION LINK TYPE		AK_ID	Numb er	NUMBER(12)	NOT NULL	No	No		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
COMMUNICATION- LINK TYPE		ARCHIVE_ DATE	Date	DATE	NULL	No	No		
COMMUNICATION- LINK TYPE		CLS_CODE	String	VARCHAR2(35)	NOT NULL	No	No		
COMMUNICATION- LINK TYPE		COMM_LNK_TY_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
COMMUNICATION- LINK TYPE		CREATE_DATE	Date	DATE	NOT NULL	No	No		
COMMUNICATION- LINK TYPE		CURRENT_Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
COMMUNICATION- LINK TYPE		MOD_DATE	Date	DATE	NOT NULL	No	No		
COMMUNICATION- LINK TYPE		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
COMMUNICATION- LINK TYPE		SY_TV_VID	Number	NUMBER(12)	NULL	No	Yes		
COMMUNICATION- LINK TYPE		SY_TV_VID	Number	NUMBER(12)	NULL	No	Yes		
COMMUNICATION- CHANNEL	CHILD COMMUNICATION CIRCUIT IDENTIFIER	COM_CRC_T_ID	String	VARCHAR2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE CHILD COMMUNICATION CIRCUIT	
COMMUNICATION- CHANNEL	CHILD COMMUNICATION LINK IDENTIFIER	COM_LINK_ID	String	VARCHAR2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE CHILD COMMUNICATION LINK	
COMMUNICATION- CHANNEL	COMMUNICATION CHANNEL NUMBER	COM_CH_NUM	Number	NUMBER(12)	NULL	No	No	THE IDENTIFIER THAT REPRESENTS THE NUMBER THAT DESIGNATES A PARTICULAR COMMUNICATION-CHANNEL IN A GROUP OF COMMUNICATION-CHANNELS.	
COMMUNICATION- CHANNEL	COMMUNICATION-CHANNEL IDENTIFIER	COM_CH_ID	String	VARCHAR2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION CHANNEL	
COMMUNICATION- CHANNEL	COMMUNICATION-CHANNEL IDENTIFIER	COM_LINK_ID	String	VARCHAR2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE PARENT COMMUNICATION LINK	
COMMUNICATION- CHANNEL		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
COMMUNICATION- CHANNEL		ARCH_ID	String	VARCHAR2(50)	NULL	Yes	Yes		
COMMUNICATION- CHANNEL		ARCHIVE_DATE	Date	DATE	NULL	No	No		
COMMUNICATION- CHANNEL		CLS_CODE	String	VARCHAR2(35)	NOT NULL	No	No		
COMMUNICATION- CHANNEL		COM_CH_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
COMMUNICATION- CHANNEL		COM_CRC_T_VID	Number	NUMBER(12)	NULL	No	Yes		
COMMUNICATION- CHANNEL		COM_LNK_VID	Number	NUMBER(12)	NULL	No	Yes		
COMMUNICATION- CHANNEL		COM_LNK_VID	Number	NUMBER(12)	NULL	No	Yes		
COMMUNICATION- CHANNEL		CREATE_DATE	Date	DATE	NOT NULL	No	No		
COMMUNICATION- CHANNEL		CURRENT_Y_FLAG	String	CHAR(1)	NOT NULL	No	No		

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Annex D (Table D-1, User Accessible Entities)

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JCAPS 2.1 Attribute Specifications

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
COMMUNICATION-CHANNEL		MOD_DATE	Date	DATE	NOT NULL	No	No		
COMMUNICATION-CHANNEL		SHADE_FL	String	CHAR(1)	NOT NULL	No	No		
COMMUNICATION-CIRCUIT	CCSD	CCSD	String	VARCHAR2(9)	NULL	No	No		
COMMUNICATION-CIRCUIT	COM_CIR_TY_ID	COM_CIR_TY_ID	String	VARCHAR2(50)	NULL	No	Yes		
COMMUNICATION-CIRCUIT	COM_CRCT_DSC_TX	COM_CRCT_DSC_TX	String	VARCHAR2(2000)	NULL	No	No		
COMMUNICATION-CIRCUIT	COMMUNICATION-CIRCUIT DATA TRANSFER RATE	CC_DATA_TRNSF_RT	Number	NUMBER(15)	NULL	No	No	THE RATE AT WHICH A COMMUNICATION-CIRCUIT CAN TRANSFER DATA.	
COMMUNICATION-CIRCUIT	COMMUNICATION-CIRCUIT IDENTIFIER	COM_CRC_T_ID	String	VARCHAR2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION-CIRCUIT.	
COMMUNICATION-CIRCUIT	COMMUNICATION-CIRCUIT STATUS	CC_STATU_S_CODE	String	VARCHAR2(35)	NULL	No	No	THE CODE THAT REPRESENTS THE STATE OF A COMMUNICATION-CIRCUIT.	
COMMUNICATION-CIRCUIT	COMMUNICATION-CIRCUIT-TYPE CODE	COM_CIR_TY_CD	String	VARCHAR2(35)	NULL	No	Yes	THE CODE THAT DENOTES A KIND OF COMMUNICATION-CIRCUIT.	
COMMUNICATION-CIRCUIT	FROM_C2E_ID	FROM_C2E_ID	String	VARCHAR2(50)	NULL	No	Yes		
COMMUNICATION-CIRCUIT	FROM_SYS_ID	FROM_SYS_ID	String	VARCHAR2(50)	NULL	No	Yes		
COMMUNICATION-CIRCUIT	TO_C2E_ID	TO_C2E_ID	String	VARCHAR2(50)	NULL	No	Yes		
COMMUNICATION-CIRCUIT	TO_SYS_ID	TO_SYS_ID	String	VARCHAR2(50)	NULL	No	Yes		
COMMUNICATION-CIRCUIT		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
COMMUNICATION-CIRCUIT		ARCH_ID	String	VARCHAR2(50)	NOT NULL	Yes	Yes		
COMMUNICATION-CIRCUIT		ARCHIVE_DATE	Date	DATE	NULL	No	No		
COMMUNICATION-CIRCUIT		C2E_VID	Number	NUMBER	NULL	No	Yes		
COMMUNICATION-CIRCUIT		CLS_CODE	String	VARCHAR2(35)	NOT NULL	No	No		
COMMUNICATION-CIRCUIT		COM_CIR_TY_VID	Number	NUMBER(12)	NULL	No	Yes		
COMMUNICATION-CIRCUIT		COM_CRC_T_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
COMMUNICATION-CIRCUIT		CREATE_DATE	Date	DATE	NOT NULL	No	No		
COMMUNICATION-CIRCUIT		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
COMMUNICATION-CIRCUIT		FROM_C2E_VID	Number	NUMBER(12)	NULL	No	No		
COMMUNICATION-CIRCUIT		MOD_DATE	Date	DATE	NOT NULL	No	No		
COMMUNICATION-CIRCUIT		SHADE_FL	String	CHAR(1)	NOT NULL	No	No		

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Entity Name	Attribute Name	Col. Nm. SYS_VID	Dom. Numb er	Datatype NUMBER(12)	Null	PK	FK	Attribute Definition	Note
COMMUNICATION- CIRCUIT		SYS_VID	Numb er	NUMBER(12)	NULL	No	Yes		
COMMUNICATION- CIRCUIT		SYS_VID	Numb er	NUMBER(12)	NULL	No	Yes		
COMMUNICATION- CIRCUIT-TYPE	CCSD_AGENCY_CODE	CCSD_AGE NCY_CODE	String	CHAR(1)	NULL	No	Yes		
COMMUNICATION- CIRCUIT-TYPE	CCSD_PUR_USE_CODE	CCSD_PUR _USE_CODE	String	CHAR(2)	NULL	No	Yes		
COMMUNICATION- CIRCUIT-TYPE	CCSD_TYS_CODE	CCSD_TYS _CODE	String	CHAR(1)	NULL	No	Yes		
COMMUNICATION- CIRCUIT-TYPE	COM_CIR_TV_ID	COM_CIR_ TV_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No		
COMMUNICATION- CIRCUIT-TYPE	COM_CIR_TV_RT	COM_CIR_ TV_RT	Numb er	NUMBER(10)	NULL	No	No		
COMMUNICATION- CIRCUIT-TYPE	COMMUNICATION- CIRCUIT-TYPE ABBREVIATED NAME	COM_CIR_ TV_ABB_N M	String	VARCHAR 2(250)	NULL	No	No	THE ABBREVIATED FORM OF THE NAME OF A COMMUNICATION-CIRCUIT-TYPE.	
COMMUNICATION- CIRCUIT-TYPE	COMMUNICATION- CIRCUIT-TYPE CODE	COM_CIR_ TY_CD	String	VARCHAR 2(35)	NOT NULL	Yes	No	THE CODE THAT DENOTES A KIND OF COMMUNICATION- CIRCUIT.	
COMMUNICATION- CIRCUIT-TYPE	COMMUNICATION- CIRCUIT-TYPE DESCRIPTION TEXT	COM_CIR_ TY_D_TXT	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A COMMUNICATION-CIRCUIT- TYPE.	
COMMUNICATION- CIRCUIT-TYPE	COMMUNICATION- CIRCUIT-TYPE NAME	COM_CIR_ TY_NM	String	VARCHAR 2(250)	NULL	No	No	THE NAME OF A COMMUNICATION-CIRCUIT-TYPE.	
COMMUNICATION- CIRCUIT-TYPE	FROM_SY_TY_ID	SY_TY_ID	String	VARCHAR 2(50)	NULL	No	Yes		
COMMUNICATION- CIRCUIT-TYPE	TO_SY_TY_ID	SY_TY_ID	String	VARCHAR 2(50)	NULL	No	Yes		
COMMUNICATION- CIRCUIT-TYPE	AK_ID	AK_ID	Numb er	NUMBER(12)	NOT NULL	No	No		
COMMUNICATION- CIRCUIT-TYPE	ARCHIVE_	ARCHIVE_ DATE	Dateti me	DATE	NULL	No	No		
COMMUNICATION- CIRCUIT-TYPE	CCSD_AGE	CCSD_AGE	Numb er	NUMBER(12)	NULL	No	Yes		
COMMUNICATION- CIRCUIT-TYPE	CCSD_PUR	CCSD_PUR	Numb er	NUMBER(12)	NULL	No	Yes		
COMMUNICATION- CIRCUIT-TYPE	CCSD_TYS	CCSD_TYS	Numb er	NUMBER(12)	NULL	No	Yes		
COMMUNICATION- CIRCUIT-TYPE	CLS_CODE	CLS_CODE	String	VARCHA R2(35)	NOT NULL	No	No		
COMMUNICATION- CIRCUIT-TYPE	COM_CIR_	COM_CIR_ TV_VID	Numb er	NUMBER(12)	NOT NULL	Yes	No		
COMMUNICATION- CIRCUIT-TYPE	CREATE_D	CREATE_D	Dateti me	DATE	NOT NULL	No	No		
COMMUNICATION- CIRCUIT-TYPE	CURRENC	CURRENC	String	CHAR(1)	NOT NULL	No	No		
COMMUNICATION- CIRCUIT-TYPE	MOD_DAT	MOD_DAT	Dateti me	DATE	NOT NULL	No	No		
COMMUNICATION- CIRCUIT-TYPE	SHADE_FL	SHADE_FL	String	CHAR(1)	NOT NULL	No	No		
COMMUNICATION- CIRCUIT-TYPE	SY_TY_VID	SY_TY_VID	Numb er	NUMBER(12)	NULL	No	Yes		

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Annex D (Table D-1, User Accessible Entities)

UNCLASSIFIED

JCAPS 2.1 Attribute Specifications

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
COMMUNICATION-CIRCUIT-TYPE		SY_TY_VID	Number	NUMBER(12)	NULL	No	Yes		
COMMUNICATION-LINK	COM_LNK_TY_CD	COM_LNK_TY_CD	String	VARCHAR2(1)	NULL	No	No		
COMMUNICATION-LINK	COMMUNICATION LINK TYPE IDENTIFIER	COMM_LNK_TY_ID	String	VARCHAR2(50)	NULL	No	Yes		
COMMUNICATION-LINK	COMMUNICATION-LINK CHANNEL NUMBER QUANTITY	COM_LNK_CHN_QTY	Number	NUMBER(4)	NULL	No	No	THE NUMBER OF COMMUNICATION CHANNELS THAT CAN OPERATE ON A COMMUNICATION-LINK.	
COMMUNICATION-LINK	COMMUNICATION-LINK DESCRIPTION TEXT	COM_LNK_DSC_TX	String	VARCHAR2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A COMMUNICATION-LINK.	
COMMUNICATION-LINK	COMMUNICATION-LINK GROUP DATA TRANSFER RATE	CLG_DATA_TRNSFR_RT	Number	NUMBER(15)	NULL	No	No	THE RATE AT WHICH DATA CAN BE TRANSFERRED ON A COMMUNICATION-LINK WHEN ALL CHANNELS ON THE COMMUNICATION-LINK ARE USED.	
COMMUNICATION-LINK	COMMUNICATION-LINK IDENTIFIER	COM_LNK_ID	String	VARCHAR2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION-LINK.	
COMMUNICATION-LINK	FROM_C2E_ID	C2E_ID	String	VARCHAR2(50)	NULL	No	Yes		
COMMUNICATION-LINK	FROM_SYS_ID	SYS_ID	String	VARCHAR2(50)	NULL	No	Yes		
COMMUNICATION-LINK	SLD	SLD	String	VARCHAR2(8)	NULL	No	No		
COMMUNICATION-LINK	TO_C2E_ID	C2E_ID	String	VARCHAR2(50)	NULL	No	Yes		
COMMUNICATION-LINK	TO_SYS_ID	SYS_ID	String	VARCHAR2(50)	NULL	No	Yes		
COMMUNICATION-LINK		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
COMMUNICATION-LINK		ARCH_ID	String	VARCHAR2(50)	NULL	Yes	Yes		
COMMUNICATION-LINK		ARCHIVE_DATE	Date	DATE	NULL	No	No		
COMMUNICATION-LINK		C2E_VID	Number	NUMBER	NULL	No	Yes		
COMMUNICATION-LINK		CLS_CODE	String	VARCHAR2(35)	NOT NULL	No	No		
COMMUNICATION-LINK		COM_LNK_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
COMMUNICATION-LINK		COMM_LNK_TY_VID	Number	NUMBER(12)	NULL	No	Yes		
COMMUNICATION-LINK		CREATE_DATE	Date	DATE	NOT NULL	No	No		
COMMUNICATION-LINK		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
COMMUNICATION-LINK		MOD_DATE	Date	DATE	NOT NULL	No	No		
COMMUNICATION-LINK		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
COMMUNICATION-LINK		SYS_VID	Number	NUMBER(12)	NULL	No	Yes		
COMMUNICATION-LINK		SYS_VID	Number	NUMBER(12)	NULL	No	Yes		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
COST MANAGEMENT	COST MANAGEMENT AMOUNT	CM_AMOUNT	Number	NUMBER	NULL	No	No	THE DOLLAR AMOUNT ASSOCIATED WITH THE COST MANAGEMENT DATA	
COST MANAGEMENT	COST MANAGEMENT IDENTIFIER	COST_MAN_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No		
COST MANAGEMENT	COST MANAGEMENT TYPE	CM_TYPE	String	VARCHAR 2(50)	NULL	No	No	THE TYPE OF COST MANAGEMENT DATA	
COST MANAGEMENT	COST MANAGEMENT YEAR	CM_YEAR	Number	NUMBER(4)	NULL	No	No	THE CALENDAR YEAR WHICH APPLIES TO THE COST MANAGEMENT DATA	
COST MANAGEMENT		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
COST MANAGEMENT		ARCH_ID	String	VARCHAR 2(50)	NOT NULL	Yes	Yes		
COST MANAGEMENT		ARCHIVE_DATE	Date	DATE	NULL	No	No		
COST MANAGEMENT		CLS_CODE	String	VARCHAR 2(35)	NOT NULL	No	No		
COST MANAGEMENT		CREATE_DATE	Date	DATE	NOT NULL	No	No		
COST MANAGEMENT		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
COST MANAGEMENT		MOD_FLAG	Date	DATE	NOT NULL	No	No		
COST MANAGEMENT		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
COST MANAGEMENT		SYS_VID	Number	NUMBER(12)	NULL	No	Yes		
COUNTRY	COUNTRY ABBREVIATED NAME	CTRY_ABBRD_NM	String	VARCHAR 2(5)	NULL	No	No	(14374) (A) THE ABBREVIATED FORM OF A COUNTRY NAME.	
COUNTRY	COUNTRY CODE	CTRY_CD	String	CHAR(2)	NOT NULL	Yes	No	(14392) (A) THE CODE THAT REPRESENTS A COUNTRY.	
COUNTRY	COUNTRY NAME	CTRY_NM	String	VARCHAR 2(50)	NULL	No	No	(14397) (A) THE NAME OF A COUNTRY.	
COUNTRY	COUNTRY OFFICIAL NAME	CTRY_OFF_NM	<default>	VARCHAR 2(75)	NULL	No	No	THE FORMAL APPROVED NAME OF A COUNTRY.	
COUNTRY	COUNTRY POSTAL NAME	CTRY_PSTL_NM	String	VARCHAR 2(35)	NULL	No	No	(33864) (A) THE NAME OF A COUNTRY AS CONSTRAINED BY POSTAL ADDRESSING FORMATS.	
COUNTRY	COUNTRY SCOPE NOTE TEXT	CTRY_SCP_NT_TX	String	VARCHAR 2(50)	NULL	No	No	(17362) (A) FREE FORM TEXT EXPLAINING SOME GEOGRAPHICAL OR POLITICAL CIRCUMSTANCE ASSOCIATED WITH A COUNTRY.	
COUNTRY		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
COUNTRY		ARCHIVE_DATE	Date	DATE	NULL	No	No		
COUNTRY		CLS_CODE	String	VARCHAR 2(35)	NOT NULL	No	No		
COUNTRY		CREATE_DATE	Date	DATE	NOT NULL	No	No		
COUNTRY		CTRY_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
COUNTRY		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
COUNTRY		MOD_FLAG	Date	DATE	NOT NULL	No	No		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
COUNTRY		SHADE_FL AG	String	CHAR(1)	NOT NULL	No	No		
DOCUMENT	BACKGROUND COLOR	BG_COLOR	Number	NUMBER(10)	NULL	No	No	THE PRODUCT'S BACKGROUND COLOR	
DOCUMENT	BFILE_ID	BFILE_ID	String	VARCHAR 2(50)	NULL	No	No		
DOCUMENT	CONTROL NUMBER	CONTROL_ NUM	String	VARCHAR 2(35)	NULL	No	No	THE CONTROL NUMBER OF THE PRODUCT	
DOCUMENT	DOC_ABVR_TTL_NM	DOC_ABVR _TTL_NM	String	VARCHAR 2(250)	NULL	No	No		
DOCUMENT	DOC_VRSN_ID	DOC_VRSN _ID	String	VARCHAR 2(50)	NULL	No	No		
DOCUMENT	DOCUMENT ABBREVIATED TITLE NAME	DOCUMENT T_ABRV_T TL_NM	String	VARCHAR 2(250)	NULL	No	No	THE SHORTENED NAME OF A SPECIFIC DOCUMENT.	
DOCUMENT	DOCUMENT APPROVAL DATE	DOC_APVL _DATE	Date	DATE	NULL	No	No	(16157) (A) THE DATE THAT A DOCUMENT IS APPROVED.	
DOCUMENT	DOCUMENT CATEGORY CODE	DOC_CAT_ CODE	Number	NUMBER(5)	NULL	No	No	A CODE WHICH REPRESENT THE TYPE OF AFV2 PRODUCT	
DOCUMENT	DOCUMENT DESCRIPTION TEXT	DOC_DSC_ TX	String	VARCHAR 2(2000)	NULL	No	No	(18077) (D) THE TEXT THAT DESCRIBES A DOCUMENT.	
DOCUMENT	DOCUMENT IDENTIFIER	DOC_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	(9643) (A) THE IDENTIFIER THAT REPRESENTS A DOCUMENT (AFV2 PRODUCT).	
DOCUMENT	DOCUMENT NAME	DOCUMENT T_NAME	String	VARCHAR 2(250)	NULL	No	No	(7125) (A) THE NAME OF A DOCUMENT.	
DOCUMENT	DOCUMENT PUBLISHED DATE	DOC_PUB_ DATE	Date	DATE	NULL	No	No	(20630) (D) THE DATE A DOCUMENT IS PUBLISHED.	
DOCUMENT	DOCUMENT SOURCE NAME	DOC_SRC_ NM	String	VARCHAR 2(250)	NULL	No	No	THE NAME FOR THE ORIGINATOR OF A SPECIFIC DOCUMENT.	
DOCUMENT	DOCUMENT SPECIFIC INITIALIZATION FILE NAME	DOC_FILE_ NAME	String	VARCHAR 2(80)	NULL	No	No	THE NAME OF AN INITIALIZATION FILE FOR A DOCUMENT.	
DOCUMENT	DOCUMENT SPECIFIC INITIALIZATION FILE PATH TEXT	DOC_SP_F P	String	CHAR(80)	NULL	No	No	THE TEXT THAT DESCRIBES THE PATH NEEDED TO ACCESS AN INITIALIZATION FILE.	
DOCUMENT	LETUID	LETUID	Number	NUMBER(10)	NULL	No	No	THE IDENTIFIER THAT REPRESENTS THE RELATED DRAW INFORMATION FOR THIS PRODUCT	
DOCUMENT	SECTION IDENTIFIER	SECTION_I D	String	VARCHAR 2(35)	NULL	No	No	THE SECTION IDENTIFIER OF THE PRODUCT	
DOCUMENT	SUMMARY DESCRIPTION TEXT	SUMMARY _DTX	String	VARCHAR 2(2000)	NULL	No	No	TEXT WHICH DESCRIBES THE PRODUCT	
DOCUMENT		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
DOCUMENT		ARCHIVE_ DATE	Date	DATE	NULL	No	No		
DOCUMENT		BFILE_VID	Number	NUMBER(12)	NULL	No	No		
DOCUMENT		CLS_CODE	String	VARCHA R2(35)	NOT NULL	No	No		
DOCUMENT		CREATE_D ATE	Date	DATE	NOT NULL	No	No		
DOCUMENT		CURRENC Y_FLAG	String	CHAR(1)	NOT NULL	No	No		

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Entity Name	Attribute Name	Col. Nm. D_MASK	Dom. String	Datatype R2(255)	Null	PK	FK	Attribute Definition	Note
DOCUMENT					NULL	No	No		
DOCUMENT		DOC_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
DOCUMENT		MOD_DATE	Date	DATE	NOT NULL	No	No		
DOCUMENT		Q_ID	String	VARCHAR(50)	NULL	No	No		
DOCUMENT		Q_VID	Number	NUMBER(12)	NULL	No	No		
DOCUMENT		SHADE_FLAG	String	CHAR(3)	NOT NULL	No	No		
ECHELON	ECHELON ABBREVIATION CODE	EHLN_ABR_CD	String	VARCHAR(35)	NULL	No	No	THE CODE THAT DENOTES AN ABBREVIATION FOR AN ECHELON.	
ECHELON	ECHELON DESCRIPTION TEXT	EHLN_DSC_TXT	String	VARCHAR(2000)	NULL	No	No	THE TEXT THAT DESCRIBES AN ECHELON.	
ECHELON	ECHELON IDENTIFIER	ECHELON_ID	String	VARCHAR(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS AN ECHELON.	
ECHELON	ECHELON NAME	ECHELON_NAME	String	VARCHAR(250)	NULL	No	No	THE NAME OF AN ECHELON.	
ECHELON		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
ECHELON		ARCHIVE_DATE	Date	DATE	NULL	No	No		
ECHELON		CLS_CODE	String	VARCHAR(35)	NOT NULL	No	No		
ECHELON		CREATE_DATE	Date	DATE	NOT NULL	No	No		
ECHELON		CURRENCY_FLAG	String	CHAR(1)	NOT NULL	No	No		
ECHELON		ECHELON_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
ECHELON		MOD_DATE	Date	DATE	NOT NULL	No	No		
ECHELON		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
INFORMATION-EXCHANGE-REQUIREMENT	COMMUNICATION-MEDIUM IDENTIFIER	COM_MED_ID	String	VARCHAR(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION-MEDIUM.	
INFORMATION-EXCHANGE-REQUIREMENT	FREQUENCY BAND IDENTIFIER	FREQ_BAND_ID	String	VARCHAR(50)	NULL	No	No	THE IDENTIFIER THAT REPRESENTS THE FREQUENCY BAND ASSOCIATED WITH THE IER	
INFORMATION-EXCHANGE-REQUIREMENT	ICOM NAME	ICOM_NAME	String	VARCHAR(250)	NULL	No	No	THE NAME OF THE ACTIVITY INFORMATION (INPUT-CONTROL-OUTPUT-MECHANISM) ASSOCIATED WITH THE IER	
INFORMATION-EXCHANGE-REQUIREMENT	IER_TMLY_CD2	IER_TMLY_CD	String	VARCHAR(35)	NULL	No	No		
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT ACCURACY DESCRIPTION TEXT	IER_ACC_DTX	String	VARCHAR(2000)	NULL	No	No	THE TEXT THAT SUMMARIZES THE DEGREE OF CORRECTNESS OF A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	

Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT AVAILABILITY INDICATOR CODE	IER_AVAL_IND_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT REPRESENTS THE ASSESSMENT OF THE CURRENT CAPABILITY TO OBTAIN THE INFORMATION FOR A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	A--Available; SA--Sometimes Available; N--Never Available. [HDD for Naval Architecture Database]
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT CAPABILITY TEXT	IER_CAPABILITY_TX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT SPECIFIES WHAT AN INFORMATION-EXCHANGE-REQUIREMENT IS ABLE TO ACCOMPLISH.	
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT CONTENT DESCRIPTION TEXT	IER_CNTN_DTX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT AMPLIFIES THE DESIGNATION OF THE DATA INCORPORATED INTO A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT IDENTIFIER	IER_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS AN INFORMATION-EXCHANGE-REQUIREMENT.	
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT INFORMATION CLASS CODE	IER_INF_LS_CODE	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT DENOTES THE TYPE OF DATA FOR A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	Digital ASCII data; Digital bit-oriented data; I--Image; T--Text ASCII; VD--Video; V--Voice; Other; Not specified; Not known. [Derived from HDD for the Naval Architecture Database]
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT INFORMATION ELEMENT MULTIPLE QUANTITY	IER_INF_ELMT_QY	Number	NUMBER(15)	NULL	No	No	THE NUMBER OF TIMES A SPECIFIC INFORMATION ELEMENT IS SENT AS A RESULT OF AN INFORMATION-EXCHANGE-REQUIREMENT.	
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT INTEROPERABILITY LEVEL CODE	IER_INTRO_P_LVL_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT DENOTES THE CLASS OF TECHNICAL MEANS INTENDED TO BE USED FOR SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	A--Universal (Virtual C4I System) Interoperability; B--Advanced (Integrated Systems) Interoperability; C--Intermediate (Distributed Systems) Interoperability; D--Basic (Discrete Systems Interaction) Interoperability. [Levels of Information System Interoperability, C4ISR Architecture Framework, Version 1]
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT MEDIUM TEXT	IER_MEDIUM_TX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT SPECIFIES THE TYPE OF MEDIUM FOR AN INFORMATION-EXCHANGE-REQUIREMENT.	
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT PURPOSE DESCRIPTION TEXT	IER_PRPS_DTX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT CHARACTERIZES THE OBJECTIVE OF A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT QUALITY CODE	IER_QUAL_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT REPRESENTS THE LEVEL OF CLARITY OF A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	Clearly defined; Generally defined; Not adequately described; Not specified; Not known.

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT RANGE TEXT	IER_RNG_TX	String	VARCHAR 2(2000)	NULL	No	No	THE DISTANCE OVER WHICH AN INFORMATION-EXCHANGE-REQUIREMENT IS SENT AND RECEIVED.	
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT RANGE UNITS TEXT	IER_RNG_UN_TX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES THE UNITS USED TO EXPRESS THE RANGE OF AN INFORMATION EXCHANGE REQUIREMENT.	
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT SECURITY LEVEL CODE	IER_SEC_LVL_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT DESIGNATES THE GENERAL CLASS OF RESTRICTION FOR A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	Unclassified, Confidential, Secret, Secret/NATO, Secret/Rel ROK, Secret/NF, Secret/SCI, Top Secret, Top Secret/SCI.
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT SUBSCRIPTION TYPE TEXT	IER_SBSC_N_TY_TX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT SUMMARIZES THE CLASS OF CONTROL ASSOCIATION WITH DISSEMINATING A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	To be defined (see C4ISR Architecture Framework).
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT TRANSACTION TYPE TEXT	IER_TRNS_ACT_TY_TX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT SUMMARIZES THE INTENDED METHOD OF TRANSMISSION FOR A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT VOLUME INDICATOR CODE	IER_VL_IN_D_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT REPRESENTS AN ESTIMATE OF THE AMOUNT OF RELEVANT INFORMATION THAT IS PROVIDED FOR A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	H--High; M--Medium; L--Low. [HDD for Naval Architecture Database]
INFORMATION-EXCHANGE-REQUIREMENT	MESSAGE FREQUENCY OF EXCHANGE	IE_FREQ_OF_EXCN	String	VARCHAR 2(250)	NULL	No	No	THE FREQUENCY OF EXCHANGE OF THE ASSOCIATED MESSAGE [AUTO POPULATED VIA TRIGGER]	
INFORMATION-EXCHANGE-REQUIREMENT	MESSAGE IDENTIFIER	MESSAGE_ID	String	VARCHAR 2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE MESSAGE ASSOCIATED WITH THE IER	
INFORMATION-EXCHANGE-REQUIREMENT	MESSAGE MEDIA TEXT	IE_MSG_MEDIA_TX	String	VARCHAR 2(2000)	NULL	No	No	THE MEDIA TEXT OF THE ASSOCIATED MESSAGE [AUTO POPULATED VIA TRIGGER]	
INFORMATION-EXCHANGE-REQUIREMENT	MESSAGE NAME	IE_MESSAGE_NAME	String	VARCHAR 2(250)	NULL	No	No	THE NAME OF THE ASSOCIATED MESSAGE [AUTO POPULATED VIA TRIGGER]	
INFORMATION-EXCHANGE-REQUIREMENT	MESSAGE PRIORITY	IE_PRIORITY	String	VARCHAR 2(250)	NULL	No	No	THE PRIORITY OF THE ASSOCIATED MESSAGE [AUTO POPULATED VIA TRIGGER]	
INFORMATION-EXCHANGE-REQUIREMENT	MESSAGE THROUGHPUT	IE_THROUGHPUT	Number	NUMBER(12)	NULL	No	No	THE THROUGHPUT OF THE ASSOCIATED MESSAGE [AUTO POPULATED VIA TRIGGER]	
INFORMATION-EXCHANGE-REQUIREMENT	MESSAGE THROUGHPUT UNITS	IE_THRPUT_UNITS	String	VARCHAR 2(250)	NULL	No	No	THE THROUGHPUT UNITS OF THE ASSOCIATED MESSAGE [AUTO POPULATED VIA TRIGGER]	

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
INFORMATION- EXCHANGE- REQUIREMENT	MESSAGE TIMELINESS	IE_TIMELIN ESS	String	VARCHAR 2(250)	NULL	No	No	THE TIMELINESS OF THE ASSOCIATED MESSAGE [AUTO POPULATED VIA TRIGGER]	
INFORMATION- EXCHANGE- REQUIREMENT	RECEIVING ACTIVITY IDENTIFIER	PRCS_ACT Y_ID	String	VARCHAR 2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE RECEIVING ACTIVITY	
INFORMATION- EXCHANGE- REQUIREMENT	RECEIVING ACTIVITY NAME	PRCS_ACT Y_NM_2	String	VARCHAR 2(250)	NULL	No	No	THE NAME OF THE RECEIVING ACTIVITY [AUTO POPULATED VIA TRIGGER]	
INFORMATION- EXCHANGE- REQUIREMENT	RECEIVING C2E IDENTIFIER	C2E_ID	String	VARCHAR 2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE RECEIVING COMMAND AND CONTROL ELEMENT	
INFORMATION- EXCHANGE- REQUIREMENT	RECEIVING C2E NAME	C2E_NM_2	String	VARCHAR 2(250)	NULL	No	No	THE NAME OF THE RECEIVING COMMAND AND CONTROL ELEMENT [AUTO POPULATED VIA TRIGGER]	
INFORMATION- EXCHANGE- REQUIREMENT	RECEIVING ORGANIZATION IDENTIFIER	ORG_ID	String	VARCHAR 2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE RECEIVING ORGANIZATION	
INFORMATION- EXCHANGE- REQUIREMENT	RECEIVING ORGANIZATION NAME	ORG_NM_2	String	VARCHAR 2(250)	NULL	No	No	THE NAME OF THE RECEIVING ORGANIZATION [AUTO POPULATED VIA TRIGGER]	
INFORMATION- EXCHANGE- REQUIREMENT	RECEIVING UJTL HIERARCHY NUMBER	NUM_ID_2	String	VARCHAR 2(50)	NULL	No	No	THE UJTL HIERARCHY NUMBER ASSOCIATED WITH THE RECEIVING ACTIVITY	
INFORMATION- EXCHANGE- REQUIREMENT	RECEIVING UJTL WAR CODE	WAR_CD_2	String	CHAR(2)	NULL	No	No	THE UJTL WAR CODE ASSOCIATED WITH THE RECEIVING ACTIVITY	
INFORMATION- EXCHANGE- REQUIREMENT	SCENARIO IDENTIFIER	SCENARIO _ID	String	VARCHAR 2(50)	NULL	No	No	THE IDENTIFIER THAT REPRESENTS THE SCENARIO ASSOCIATED WITH THE IER	
INFORMATION- EXCHANGE- REQUIREMENT	SENDING ACTIVITY IDENTIFIER	PRCS_ACT Y_ID	String	VARCHAR 2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE SENDING ACTIVITY	
INFORMATION- EXCHANGE- REQUIREMENT	SENDING ACTIVITY NAME	PRCS_ACT Y_NM_1	String	VARCHAR 2(250)	NULL	No	No	THE NAME OF THE SENDING ACTIVITY [AUTO POPULATED VIA TRIGGER]	
INFORMATION- EXCHANGE- REQUIREMENT	SENDING C2E IDENTIFIER	C2E_ID	String	VARCHAR 2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE SENDING COMMAND & CONTROL ELEMENT	
INFORMATION- EXCHANGE- REQUIREMENT	SENDING C2E NAME	C2E_NM_1	String	VARCHAR 2(250)	NULL	No	No	THE NAME OF THE SENDING COMMAND AND CONTROL ELEMENT [AUTO POPULATED VIA TRIGGER]	
INFORMATION- EXCHANGE- REQUIREMENT	SENDING ORGANIZATION IDENTIFIER	ORG_ID	String	VARCHAR 2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE SENDING ORGANIZATION	
INFORMATION- EXCHANGE- REQUIREMENT	SENDING ORGANIZATION NAME	ORG_NM_1	String	VARCHAR 2(250)	NULL	No	No	THE NAME OF THE SENDING ORGANIZATION [AUTO POPULATED VIA TRIGGER]	
INFORMATION- EXCHANGE- REQUIREMENT	SENDING UJTL HIERARCHY NUMBER	NUM_ID_1	String	VARCHAR 2(50)	NULL	No	No	THE UJTL HIERARCHY NUMBER ASSOCIATED WITH THE SENDING ACTIVITY	
INFORMATION- EXCHANGE- REQUIREMENT	SENDING UJTL WAR CODE	WAR_CD_1	String	CHAR(2)	NULL	No	No	THE UJTL WAR CODE ASSOCIATED WITH THE SENDING ACTIVITY	

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
INFORMATION- EXCHANGE- REQUIREMENT	SEQ_NO_ID2	SEQ_NO_ID	String	VARCHAR 2(50)	NULL	No	No		
INFORMATION- EXCHANGE- REQUIREMENT		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
INFORMATION- EXCHANGE- REQUIREMENT		ARCH_ID	String	VARCHAR R2(50)	NULL	Yes	Yes		
INFORMATION- EXCHANGE- REQUIREMENT		ARCHIVE_ DATE	Date	DATE	NULL	No	No		
INFORMATION- EXCHANGE- REQUIREMENT		C2E_VID	Number	NUMBER	NULL	No	Yes		
INFORMATION- EXCHANGE- REQUIREMENT		CLS_CODE	String	VARCHAR R2(35)	NOT NULL	No	No		
INFORMATION- EXCHANGE- REQUIREMENT		COM_MED _VID	Number	NUMBER(12)	NULL	No	Yes		
INFORMATION- EXCHANGE- REQUIREMENT		CREATE_D ATE	Date	DATE	NOT NULL	No	No		
INFORMATION- EXCHANGE- REQUIREMENT		CURRENC Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
INFORMATION- EXCHANGE- REQUIREMENT		FNCT_ARE A_VID	Number	NUMBER(12)	NULL	No	Yes		
INFORMATION- EXCHANGE- REQUIREMENT		FREQ_BAN D_VID	Number	NUMBER(12)	NULL	No	No		
INFORMATION- EXCHANGE- REQUIREMENT		ICOM_VID	Number	NUMBER(12)	NULL	No	No		
INFORMATION- EXCHANGE- REQUIREMENT		IER_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
INFORMATION- EXCHANGE- REQUIREMENT		MESSAGE_ VID	Number	NUMBER(12)	NULL	No	Yes		
INFORMATION- EXCHANGE- REQUIREMENT		MOD_DAT E	Date	DATE	NOT NULL	No	No		
INFORMATION- EXCHANGE- REQUIREMENT		MSN_AR_V ID	Number	NUMBER(12)	NULL	No	Yes		
INFORMATION- EXCHANGE- REQUIREMENT		ORG_VID	Number	NUMBER(12)	NULL	No	Yes		
INFORMATION- EXCHANGE- REQUIREMENT		ORG_VID	Number	NUMBER(12)	NULL	No	Yes		

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Annex D (Table D-1, User Accessible Entities)

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JCAPS 2.1 Attribute Specifications

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
INFORMATION- EXCHANGE- REQUIREMENT		PRCS_ACT Y_VID	Numb er	NUMBER(12)	NULL	No	Yes		
INFORMATION- EXCHANGE- REQUIREMENT		PRCS_ACT Y_VID	Numb er	NUMBER(12)	NULL	No	Yes		
INFORMATION- EXCHANGE- REQUIREMENT		SCENARIO _VID	Numb er	NUMBER(12)	NULL	No	No		
INFORMATION- EXCHANGE- REQUIREMENT		SEQ_NO_V ID	Numb er	NUMBER(12)	NULL	No	No		
INFORMATION- EXCHANGE- REQUIREMENT		SHADE_FL AG	String	CHAR(1)	NOT NULL	No	No		
	INTERFACE DESCRIPTION TEXT	INTF_DESC _TXT	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT WHICH DESCRIBES THE INTERFACE	
	INTERFACE IDENTIFIER	INTF_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS AN INTERFACE	
	INTERFACE NAME	INTF_NAM E	String	VARCHAR 2(250)	NULL	No	No	THE NAME OF THE INTERFACE	
	INTERFACE TYPE IDENTIFIER	INTF_TY_ID	String	VARCHAR 2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE BASE TYPE OF INTERFACE FROM WHICH THIS INTERFACE IS DERIVED	
	RECEIVING C2E IDENTIFIER	C2E_ID	String	VARCHAR 2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE RECEIVING COMMAND CONTROL ELEMENT	
	RECEIVING SYSTEM IDENTIFIER	SYS_ID	String	VARCHAR 2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE RECEIVING SYSTEM	
	SENDING C2E IDENTIFIER	C2E_ID	String	VARCHAR 2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE SENDING COMMAND CONTROL ELEMENT	
	SENDING SYSTEM IDENTIFIER	SYS_ID	String	VARCHAR 2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE SENDING SYSTEM	
		AK_ID	Numb er	NUMBER(12)	NOT NULL	No	No		
		ARCH_ID	String	VARCHA R2(50)	NOT NULL	Yes	Yes		
		ARCHIVE_ DATE	Dateti me	DATE	NULL	No	No		
		C2E_VID	Numb er	NUMBER	NULL	No	Yes		
		CLS_CODE	String	VARCHA R2(35)	NOT NULL	No	No		
		CREATE_D ATE	Dateti me	DATE	NOT NULL	No	No		
		CURRENC Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
		INTF_TY_VI D	Numb er	NUMBER(12)	NULL	No	Yes		
		INTF_VID	Numb er	NUMBER(12)	NOT NULL	Yes	No		
		MOD_DAT E	Dateti me	DATE	NOT NULL	No	No		
		SHADE_FL AG	String	CHAR(1)	NOT NULL	No	No		

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Entity Name	Attribute Name	Col. Nm. SYS_VID	Dom. Numb er	Datatype NUMBER(12)	Null	PK	FK	Attribute Definition	Note
INTERFACE		SYS_VID	String	NUMBER(12)	NULL	No	Yes		
INTERFACE		SYS_VID	String	NUMBER(12)	NULL	No	Yes		
INTERFACE TYPE	COMMUNICATION CIRCUIT TYPE IDENTIFIER	COM_CIR_TY_ID	String	VARCHAR2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE RELATED COMMUNICATION CIRCUIT	
INTERFACE TYPE	COMMUNICATION LINK TYPE IDENTIFIER	COMM_LN_K_TY_ID	String	VARCHAR2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE RELATED COMMUNICATION LINK	
INTERFACE TYPE	COMMUNICATION-CIRCUIT-TYPE CODE	COM_CIR_TY_CD	String	VARCHAR2(35)	NULL	No	Yes	THE CODE THAT DENOTES A KIND OF COMMUNICATION-CIRCUIT	
INTERFACE TYPE	INTERFACE TYPE DESCRIPTION TEXT	INTF_TY_D_ESC_TXT	String	VARCHAR2(2000)	NULL	No	No	THE TEXT WHICH DESCRIBES THE INTERFACE TYPE	
INTERFACE TYPE	INTERFACE TYPE IDENTIFIER	INTF_TY_ID	String	VARCHAR2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A GENERIC TYPE OF INTERFACE	
INTERFACE TYPE	INTERFACE TYPE NAME	INTF_TY_N	String	VARCHAR2(250)	NULL	No	No	THE NAME OF THE INTERFACE TYPE	
INTERFACE TYPE	INTF_TY_AUTO_CD	INTF_TY_A_UTO_CD	Numb er	NUMBER(1)	NULL	No	No		
INTERFACE TYPE	Y2K COMPLIANCE LEVEL CODE	Y2K_COMP_LVL_CD	String	VARCHAR2(250)	NULL	No	No	THE CODE WHICH REPRESENTS THE LEVEL OF Y2K COMPLIANCE THIS INTERFACE MEETS	
INTERFACE TYPE		AK_ID	Numb er	NUMBER(12)	NOT NULL	No	No		
INTERFACE TYPE		ARCHIVE_DATE	Date time	DATE	NULL	No	No		
INTERFACE TYPE		CLS_CODE	String	VARCHAR2(35)	NOT NULL	No	No		
INTERFACE TYPE		COM_CIR_TY_VID	Numb er	NUMBER(12)	NULL	No	Yes		
INTERFACE TYPE		COMM_LN_K_TY_VID	Numb er	NUMBER(12)	NULL	No	Yes		
INTERFACE TYPE		CREATE_DATE	Date time	DATE	NOT NULL	No	No		
INTERFACE TYPE		CURRENT_Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
INTERFACE TYPE		INTF_TY_VID	Numb er	NUMBER(12)	NOT NULL	Yes	No		
INTERFACE TYPE		MOD_DATE	Date time	DATE	NOT NULL	No	No		
INTERFACE TYPE		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
MESSAGE	CORE TASK	CORE_TASK	String	VARCHAR2(250)	NULL	No	No	THE CORE TASK ASSOCIATED WITH THE MESSAGE	
MESSAGE	FREQUENCY OF EXCHANGE	FREQ_OF_EXGN	String	VARCHAR2(2000)	NULL	No	No	THE FREQUENCY AT WHICH THE MESSAGE IS TO BE SENT	
MESSAGE	MESSAGE AVAILABILITY INDICATOR CODE	MSG_VL_IN_D_CD	String	VARCHAR2(50)	NULL	No	No	THE CODE THAT REPRESENTS THE ASSESSMENT OF THE CURRENT CAPABILITY TO OBTAIN THE INFORMATION FOR A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	
MESSAGE	MESSAGE DESCRIPTION TEXT	MESSAGE_DSC_TX	String	VARCHAR2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A MESSAGE.	
MESSAGE	MESSAGE IDENTIFIER	MESSAGE_ID	String	VARCHAR2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A MESSAGE	

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Annex D (Table D-1, User Accessible Entities)

UNCLASSIFIED

JCAPS 2.1 Attribute Specifications

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
MESSAGE	MESSAGE MEDIA TEXT	MSG_MEDIA_TX	String	VARCHAR2(2000)	NULL	No	No	THE TEXT OF THE MESSAGE	
MESSAGE	MESSAGE NAME	MESSAGE_NM	String	VARCHAR2(250)	NOT NULL	No	No	THE NAME OF A MESSAGE.	
MESSAGE	MESSAGE_NAME	MESSAGE_NAME	String	VARCHAR2(250)	NULL	No	No		
MESSAGE	MSG_DSC_TX	MSG_DSC_TX	String	VARCHAR2(2000)	NULL	No	No		
MESSAGE	PERISHABLE FLAG	PERISH_FLAG	String	CHAR(1)	NULL	No	No	A BOOLEAN WHICH DENOTES WHETHER OR NOT THE MESSAGE INFORMATION IS PERISHABLE	
MESSAGE	PRIORITY	PRIORITY	String	VARCHAR2(250)	NULL	No	No	THE PRIORITY OF THE MESSAGE INFORMATION	
MESSAGE	SECURITY	SECURITY	String	VARCHAR2(250)	NULL	No	No	THE SECURITY CLASSIFICATION OF THE MESSAGE INFORMATION	
MESSAGE	THROUGHPUT	THROUGHPUT	Number	NUMBER(12)	NULL	No	No	THE NUMERICAL THROUGHPUT OR DATA RATE OF THE INFORMATION FLOW	
MESSAGE	THROUGHPUT UNITS	THRPUT_UNITS	String	VARCHAR2(250)	NULL	No	No	THE UNIT SPECIFIER OF THE THROUGHPUT	
MESSAGE	TIMELINESS	TIMELINESS	String	VARCHAR2(250)	NULL	No	No	THE RELATIVITY TO REAL TIME AT WHICH THE INFORMATION EXCHANGE IS OCCURRING	
MESSAGE		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
MESSAGE		ARCH_ID	String	VARCHAR2(50)	NOT NULL	Yes	No		
MESSAGE		ARCHIVE_DATE	Date	DATE	NULL	No	No		
MESSAGE		CLS_CODE	String	VARCHAR2(35)	NOT NULL	No	No		
MESSAGE		CREATE_DATE	Date	DATE	NOT NULL	No	No		
MESSAGE		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
MESSAGE		MESSAGE_ID	Number	NUMBER(12)	NOT NULL	Yes	No		
MESSAGE		MOD_DATE	Date	DATE	NOT NULL	No	No		
MESSAGE		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
ORGANIZATION	COUNTRY CODE	CTRY_CD	String	CHAR(2)	NULL	No	Yes	A CODE WHICH DENOTES THE HOME COUNTRY OF THE ORGANIZATION	
ORGANIZATION	ECHELON IDENTIFIER	ECHELON_ID	String	VARCHAR2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS AN ECHELON	
ORGANIZATION	ECHELON LEVEL CODE	EHLN_LVL_CD	String	VARCHAR2(35)	NULL	No	No	A CODE WHICH DENOTES THE LEVEL OF THE ECHELON OF THE ORGANIZATION	
ORGANIZATION	ORGANIZATION ADDRESS TEXT	ORG_ADDRESS_TEXT	String	VARCHAR2(2000)	NULL	No	No	THE MAILING ADDRESS OF THE ORGANIZATION	
ORGANIZATION	ORGANIZATION ADMINISTRATIVE LOSS RATE	ORG_ADMIN_LOSS_RT	Number	NUMBER(15)	NULL	No	No	(29204) (A) THE ACTUAL RATE OF PERSONNEL ATTRITION APPLICABLE TO AN ORGANIZATION.	
ORGANIZATION	ORGANIZATION ARM TYPE CODE	ORG_ARM_TY_CD	String	VARCHAR2(50)	NULL	No	Yes	THE CODE WHICH DENOTES THE ARM TYPE OF THE ORGANIZATION	

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
ORGANIZATION	ORGANIZATION CATEGORY CODE	ORG_CAT_CD	String	VARCHAR 2(35)	NULL	No	No	(23495) (A) THE CODE THAT REPRESENTS A CLASSIFICATION OF AN ORGANIZATION.	
ORGANIZATION	ORGANIZATION CLASSIFICATION CODE	ORG_CLSN_CD	String	VARCHAR 2(35)	NULL	No	No	(17043) (A) THE CODE THAT REPRESENTS A CATEGORIZATION OF AN ORGANIZATION.	
ORGANIZATION	ORGANIZATION CURRENT ABBREVIATED NAME	ORG_CUR_ABRV_NM	String	VARCHAR 2(250)	NULL	No	No	A SHORTENED FORM OF THE CURRENT NAME OF AN ORGANIZATION.	
ORGANIZATION	ORGANIZATION CURRENT NAME	ORG_CUR_NM	String	VARCHAR 2(250)	NULL	No	No	THE NAME OF THE ORGANIZATION AT THE PRESENT TIME.	
ORGANIZATION	ORGANIZATION DESCRIPTION TEXT	ORG_DSC_TX	String	VARCHAR 2(2000)	NULL	No	No	(4882) (A) THE TEXT DESCRIBING AN ORGANIZATION.	
ORGANIZATION	ORGANIZATION DURATION TYPE CODE	ORG_DUR_TY_CD	String	VARCHAR 2(35)	NULL	No	No	(23496) (A) THE CODE THAT REPRESENTS A SPECIFIC KIND OF TIME FRAME ASSOCIATED WITH AN ORGANIZATION.	
ORGANIZATION	ORGANIZATION ENTERPRISE TYPE CODE	ORG_ENTR_PZ_TY_CD	String	VARCHAR 2(35)	NULL	No	No	(32511) (A) THE CODE THAT DENOTES THE KIND OF ENTERPRISE UNDERTAKEN BY AN ORGANIZATION.	
ORGANIZATION	ORGANIZATION FRIEND FOE CODE	ORG_FR_FOE_CD	String	VARCHAR 2(35)	NULL	No	No	(11228) (A) THE CODE THAT DENOTES WHETHER A SPECIFIC ORGANIZATION IS FRIENDLY.	
ORGANIZATION	ORGANIZATION IDENTIFIER	ORG_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	(7875) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	
ORGANIZATION	ORGANIZATION OPERATIONAL ELEMENT INDICATOR CODE	ORG_OPR_NL_ELMT_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT DENOTES WHETHER AN INSTANCE OF ORGANIZATION IS CONSIDERED TO BE AN OPERATION FACILITY (OPFAC) OR OTHER SENDER OR RECEIVER OF INFORMATION.	Serves as an operational element; Serves as an operational facility; Not applicable; Not specified; Not known.
ORGANIZATION	ORGANIZATION PRIMARY ACTIVITY CODE	ORG_PRM_ACTY_CD	String	VARCHAR 2(35)	NULL	No	No	(12712) (A) THE CODE THAT REPRESENTS THE PRINCIPAL BUSINESS FUNCTION OF AN ORGANIZATION.	
ORGANIZATION	ORGANIZATION PRIMARY INDUSTRY CATEGORY CODE	ORG_PRM_IND_CAT_CD	String	VARCHAR 2(35)	NULL	No	No	(12697) (A) THE CODE THAT REPRESENTS A CLASSIFICATION OF THE PRINCIPAL BUSINESS AREA OF AN ORGANIZATION.	
ORGANIZATION	ORGANIZATION SERVICE TYPE CODE	ORG_SRV_TY_CD	String	VARCHAR 2(50)	NULL	No	Yes	THE CODE WHICH DENOTES THE SERVICE TYPE OF THE ORGANIZATION	
ORGANIZATION	ORGANIZATION TYPE CODE	ORG_TY_CD	String	VARCHAR 2(35)	NULL	No	No	(12705) (A) THE CODE THAT REPRESENTS A KIND OF ORGANIZATION.	
ORGANIZATION	ORGANIZATION VENDOR INDICATOR CODE	ORG_VND_R_IND_CD	String	VARCHAR 2(35)	NULL	No	No	(16302) (A) A CODE THAT INDICATES THAT THE ORGANIZATION IS A VENDOR.	
ORGANIZATION	UIC CODE	UIC_CD	String	VARCHAR 2(35)	NULL	No	No	THE UNIT IDENTIFIER CODE OF THE ORGANIZATION	
ORGANIZATION		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
ORGANIZATION		ARCH_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No		
ORGANIZATION		ARCHIVE_DATE	Date	DATE	NULL	No	No		
ORGANIZATION		CLS_CODE	String	VARCHAR 2(35)	NOT NULL	No	No		
ORGANIZATION		CREATE_DATE	Date	DATE	NOT NULL	No	No		

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Annex D (Table D-1, User Accessible Entities)

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JCAPS 2.1 Attribute Specifications

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
ORGANIZATION		CTRY_VID	String	NUMBER(12)	NULL	No	Yes		
ORGANIZATION		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
ORGANIZATION		ECHELON_VID	Number	NUMBER(12)	NULL	No	Yes		
ORGANIZATION		EHLN_LVL_VID	Number	NUMBER(12)	NULL	No	No		
ORGANIZATION		MOD_DATE	Date	DATE	NOT NULL	No	No		
ORGANIZATION		ORG_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
ORGANIZATION		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
ORGANIZATION		UIC_VID	Number	NUMBER(12)	NULL	No	No		
PROCESS-ACTIVITY	ACTION IDENTIFIER	ACTION_ID	String	VARCHAR(2(50))	NULL	No	No	THE IDENTIFIER THAT REPRESENTS AN ACTION	
PROCESS-ACTIVITY	PROCESS ACTIVITY DERIVATION	PROCS_ACT_Y_DERIV	String	VARCHAR(2(50))	NULL	No	No	THE ACTIVITY FROM WHICH THIS ACTIVITY IS DERIVED	
PROCESS-ACTIVITY	PROCESS HIERARCHY NUMBER IDENTIFIER	PROCS_HIER_NUM_ID	String	VARCHAR(2(50))	NULL	No	No	THE IDENTIFIER THAT REPRESENTS A NON-UJTL HIERARCHY NUMBER	
PROCESS-ACTIVITY	PROCESS-ACTIVITY CREATION DATE	PROCS_ACT_Y_CRTN_DT	Date	DATE	NULL	No	No	(20453) (A) THE ORIGINATION DATE OF A PROCESS-ACTIVITY.	
PROCESS-ACTIVITY	PROCESS-ACTIVITY DEFINITION TEXT	PROCS_ACT_Y_DFN_TXT	String	VARCHAR(2(2000))	NULL	No	No	(20253) (A) THE DEFINING TEXT OF A PROCESS-ACTIVITY.	
PROCESS-ACTIVITY	PROCESS-ACTIVITY IDENTIFIER	PROCS_ACT_Y_ID	String	VARCHAR(2(50))	NOT NULL	Yes	No	(29165) (A) THE IDENTIFIER THAT REPRESENTS A PROCESS-ACTIVITY.	
PROCESS-ACTIVITY	PROCESS-ACTIVITY NAME	PROCS_ACT_Y_NM	String	VARCHAR(2(250))	NULL	No	No	(20251) (A) THE NAME OF A PROCESS-ACTIVITY.	
PROCESS-ACTIVITY	PROCESS-ACTIVITY SCOPE DESCRIPTION TEXT	PROCS_ACT_Y_SCP_DT_X	String	VARCHAR(2(2000))	NULL	No	No	(25942) (A) THE TEXT THAT DESCRIBES THE EXTENT OF A PROCESS-ACTIVITY.	
PROCESS-ACTIVITY	PROCESS-ACTIVITY SOURCE DOCUMENT TEXT	PROCS_ACT_Y_SRC_DT_X	String	VARCHAR(2(2000))	NULL	No	No	(20255) (A) THE TEXT OF THE ORIGINATION DOCUMENTATION OF A PROCESS-ACTIVITY.	
PROCESS-ACTIVITY	PROCESS-ACTIVITY UJTL CODE	PRO_ACT_UJTL_CD	String	VARCHAR(2(35))	NULL	No	No	THE CODE THAT DENOTES WHETHER THE PROCESS-ACTIVITY IS A UNIVERSAL JOINT TASK LIST (UJTL) TASK.	
PROCESS-ACTIVITY	UJTL HIERARCHY NUMBER IDENTIFIER	UJTL_HIER_NUM_ID	String	VARCHAR(2(50))	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE UJTL HIERARCHY NUMBER	
PROCESS-ACTIVITY	UJTL LEVEL WAR CODE	UJTL_LVL_WAR_CD	String	CHAR(2)	NULL	No	Yes	THE CODE WHICH DENOTES THE UJTL WAR CODE	
PROCESS-ACTIVITY	UJTL TASK IDENTIFIER	UJTL_TAS_K_ID	String	VARCHAR(2(50))	NULL	No	No	THE IDENTIFIER THAT REPRESENTS THE UJTL TASK	
PROCESS-ACTIVITY	UNIVERSAL-JOINT-TASK-LIST-TASK HIERARCHY SEQUENCE CODE	UJTL_TAS_K_HIER_SEQ_CD	<default>	CHAR(10)	NULL	No	Yes	THE CODE THAT DENOTES THE SEQUENCE OF A SPECIFIC TASK IN THE HIERARCHY OF UNIVERSAL-JOINT-TASK-LIST TASKS.	
PROCESS-ACTIVITY	UNIVERSAL-JOINT-TASK-LIST-TASK VERSION IDENTIFIER	UJTL_1	<default>	CHAR(10)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS A SPECIFIC VERSION OF A UNIVERSAL-JOINT-TASK-LIST-TASK.	

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
PROCESS-ACTIVITY		ACTION_VI D	Numb er	NUMBER(12)	NULL	No	No		
PROCESS-ACTIVITY		AK_ID	Numb er	NUMBER(12)	NOT NULL	No	No		
PROCESS-ACTIVITY		ARCH_ID	String	VARCHAR R2(50)	NOT NULL	Yes	No		
PROCESS-ACTIVITY		ARCHIVE_ DATE	Dateti me	DATE	NULL	No	No		
PROCESS-ACTIVITY		CLS_CODE	String	VARCHAR R2(35)	NOT NULL	No	No		
PROCESS-ACTIVITY		CREATE_D ATE	Dateti me	DATE	NOT NULL	No	No		
PROCESS-ACTIVITY		CURRENC Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
PROCESS-ACTIVITY		MOD_DAT E	Dateti me	DATE	NOT NULL	No	No		
PROCESS-ACTIVITY		PRCS_ACT Y_VID	Numb er	NUMBER(12)	NOT NULL	Yes	No		
PROCESS-ACTIVITY		SHADE_FL AG	String	CHAR(1)	NOT NULL	No	No		
PROCESS-ACTIVITY		UJTL_HIER VID	Numb er	NUMBER(12)	NULL	No	Yes		
PROCESS-ACTIVITY		UJTL_LVL_ WAR_VID	Numb er	NUMBER(12)	NULL	No	Yes		
SERVICE CODE	SERVICE CODE IDENTIFIER	SERVICE CODE_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A SERVICE CODE	
SERVICE CODE	SERVICE CODE TEXT	SERVICE CODE_TXT	String	VARCHAR 2(250)	NULL	No	No	THE NAME OF THE SERVICE	
SERVICE CODE		AK_ID	<defa ult>	NUMBER(12)	NOT NULL	No	No		
SERVICE CODE		ARCHIVE_ DATE	Dateti me	DATE	NULL	No	No		
SERVICE CODE		CLS_CODE	String	VARCHAR R2(35)	NOT NULL	No	No		
SERVICE CODE		CREATE_D ATE	Dateti me	DATE	NOT NULL	No	No		
SERVICE CODE		CURRENC Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
SERVICE CODE		MOD_DAT E	Dateti me	DATE	NOT NULL	No	No		
SERVICE CODE		SHADE_FL AG	String	CHAR(1)	NOT NULL	No	No		
SOFTWARE ITEM VERSION	SW_IT_BLD_ID	SW_IT_BLD_ ID	String	VARCHAR 2(50)	NULL	No	No		
SOFTWARE ITEM VERSION	SW_IT_BLD_ST_CD	SW_IT_BLD_ ST_CD	String	VARCHAR 2(35)	NULL	No	No		
SOFTWARE ITEM VERSION	SW_IT_CM_TX	SW_IT_CM_ TX	String	VARCHAR 2(2000)	NULL	No	No		
SOFTWARE ITEM VERSION	SW_IT_CPU_REQ_TX	SW_IT_CPU_ REQ_TX	String	VARCHAR 2(2000)	NULL	No	No		
SOFTWARE ITEM VERSION	SW_IT_DII_COE_CP_CD	SW_IT_DII_ COE_CP_C D	String	VARCHAR 2(35)	NULL	No	No		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
SOFTWARE ITEM VERSION	SW_IT_DK_SP_REQ_TX	SW_IT_DK_SP_REQ_TX	String	VARCHAR 2(2000)	NULL	No	No		
SOFTWARE ITEM VERSION	SW_IT_DMS_CP_CD	SW_IT_DM_S_CP_CD	String	VARCHAR 2(35)	NULL	No	No		
SOFTWARE ITEM VERSION	SW_IT_ID	SW_IT_ID	String	VARCHAR 2(50)	NULL	No	Yes		
SOFTWARE ITEM VERSION	SW_IT_MEM_REQ_TX	SW_IT_ME_M_REQ_TX	String	VARCHAR 2(2000)	NULL	No	No		
SOFTWARE ITEM VERSION	SW_IT_OP_ST_CD	SW_IT_OP_ST_CD	String	VARCHAR 2(35)	NULL	No	No		
SOFTWARE ITEM VERSION	SW_IT_REL_DT	SW_IT_RE_L_DT	Date	DATE	NULL	No	No		
SOFTWARE ITEM VERSION	SW_IT_V_OP_ST_CD	SW_IT_V_OP_ST_CD	String	VARCHAR 2(35)	NULL	No	No		
SOFTWARE ITEM VERSION	SW_IT_VER	SW_IT_VE_R	String	VARCHAR 2(35)	NULL	No	No		
SOFTWARE ITEM VERSION	SW_IT_VER_DTX	SW_IT_VE_R_DTX	String	VARCHAR 2(2000)	NULL	No	No		
SOFTWARE ITEM VERSION	SW_IT_VER_ID	SW_IT_VE_R_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No		
SOFTWARE ITEM VERSION	SW_IT_Y2K_C_DT	SW_IT_Y2K_C_DT	Date	DATE	NULL	No	No		
SOFTWARE ITEM VERSION	SW_IT_Y2K_COMP_LV_L_CD	SW_IT_Y2K_COMP_LV_L_CD	String	VARCHAR 2(250)	NULL	No	No		
SOFTWARE ITEM VERSION	SW_IT_Y2K_CST_TX	SW_IT_Y2K_CST_TX	String	VARCHAR 2(2000)	NULL	No	No		
SOFTWARE ITEM VERSION	SW_IT_Y2K_PH_NM	SW_IT_Y2K_PH_NM	String	VARCHAR 2(250)	NULL	No	No		
SOFTWARE ITEM VERSION		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
SOFTWARE ITEM VERSION		ARCHIVE_DATE	Date	DATE	NULL	No	No		
SOFTWARE ITEM VERSION		CLS_CODE	String	VARCHAR 2(35)	NOT NULL	No	No		
SOFTWARE ITEM VERSION		CREATE_DATE	Date	DATE	NOT NULL	No	No		
SOFTWARE ITEM VERSION		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
SOFTWARE ITEM VERSION		INFO_ID	<default>	VARCHAR 2(50)	NULL	No	No		
SOFTWARE ITEM VERSION		INFO_VID	Number	NUMBER(12)	NULL	No	No		
SOFTWARE ITEM VERSION		MOD_DATE	Date	DATE	NOT NULL	No	No		
SOFTWARE ITEM VERSION		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
SOFTWARE ITEM VERSION		SW_IT_VE_R_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
SOFTWARE ITEM VERSION		SW_IT_VID	Number	NUMBER(12)	NULL	No	Yes		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
SOFTWARE-ITEM VERSION		USER_ID	String	VARCHAR R2(50)	NULL	No	No		
SOFTWARE-ITEM VERSION		USER_VID	Number	NUMBER(12)	NULL	No	No		
SOFTWARE-ITEM	SOFTWARE-ITEM ABBREVIATED NAME	SW_IT_AB_NM	String	VARCHAR 2(250)	NULL	No	No	THE SHORT NAME OF A SOFTWARE-ITEM.	
SOFTWARE-ITEM	SOFTWARE-ITEM BUILD IDENTIFIER	SW_IT_BLD_ID	String	VARCHAR 2(50)	NULL	No	No	THE IDENTIFIER FOR A SPECIFIC INTEGRATION EVENT FOR A SOFTWARE-ITEM.	
SOFTWARE-ITEM	SOFTWARE-ITEM BUILD STATUS CODE	SW_IT_BLD_ST_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT DENOTES THE STATUS OF A SOFTWARE-ITEM BUILD.	
SOFTWARE-ITEM	SOFTWARE-ITEM CATEGORY CODE	SW_IT_CAT_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT DENOTES THE CLASS OF A SOFTWARE-ITEM.	Application Software; Communication Software; Encryption Software; System Software
SOFTWARE-ITEM	SOFTWARE-ITEM COMMENT TEXT	SW_IT_COM_TX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT AMPLIFIES A SOFTWARE-ITEM.	
SOFTWARE-ITEM	SOFTWARE-ITEM DESCRIPTION TEXT	SW_IT_DT_X	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A SOFTWARE-ITEM.	
SOFTWARE-ITEM	SOFTWARE-ITEM COE COMPLIANCE CODE	SW_IT_DII_COE_CP_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT DENOTES WHETHER OR NOT THE CURRENT VERSION OF A SOFTWARE-ITEM COMPLIES WITH THE DII COE.	
SOFTWARE-ITEM	SOFTWARE-ITEM DISK SPACE REQUIREMENT TEXT	SW_IT_DK_SP_RQ_TX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES THE DISK SPACE REQUIRED FOR A SOFTWARE-ITEM.	
SOFTWARE-ITEM	SOFTWARE-ITEM COMPLIANCE CODE	SW_IT_DMS_CP_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT DENOTES WHETHER OR NOT THE CURRENT VERSION OF A SOFTWARE-ITEM COMPLIES WITH THE DEFENSE MESSAGING SYSTEM.	
SOFTWARE-ITEM	SOFTWARE-ITEM LONG NAME	SW_IT_LG_NM	String	VARCHAR 2(250)	NULL	No	No	THE FULL LENGTH NAME OF A SOFTWARE-ITEM.	
SOFTWARE-ITEM	SOFTWARE-ITEM MANUFACTURER NAME	SW_IT_MFG_NM	String	VARCHAR 2(250)	NULL	No	No	THE NAME OF THE MANUFACTURER OF A SOFTWARE-ITEM.	
SOFTWARE-ITEM	SOFTWARE-ITEM MAXIMUM SIMULTANEOUS USER QUANTITY	SW_IT_MS_SU_QY	Number	NUMBER(15)	NULL	No	No	THE MAXIMUM NUMBER OF SIMULTANEOUS USERS.	
SOFTWARE-ITEM	SOFTWARE-ITEM MEMORY REQUIREMENT TEXT	SW_IT_MEM_REQ_TX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES THE MEMORY CAPACITY REQUIRED FOR THE SOFTWARE-ITEM TO FUNCTION CORRECTLY.	
SOFTWARE-ITEM	SOFTWARE-ITEM OPERATIONAL STATUS CODE	SW_IT_OP_ST_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT DENOTES THE OPERATIONAL STATUS OF THE CURRENT VERSION OF A SOFTWARE-ITEM.	
SOFTWARE-ITEM	SOFTWARE-ITEM RELEASE DATE	SW_IT_REL_DT	Date/time	DATE	NULL	No	No	THE DATE A SPECIFIC SOFTWARE-ITEM WAS DISTRIBUTED FOR GENERAL USE.	
SOFTWARE-ITEM	SOFTWARE-ITEM SOURCE TYPE CODE	SW_IT_SR_TY_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT REPRESENTS THE SOURCE OF A SOFTWARE-ITEM.	
SOFTWARE-ITEM	SOFTWARE-ITEM CODE	SW_IT_TY_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT DENOTES A KIND OF SOFTWARE-ITEM.	
SOFTWARE-ITEM	SOFTWARE-ITEM VERSION DESCRIPTION TEXT	SW_IT_VER_DTX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A SPECIFIC VERSION OF A SOFTWARE-ITEM.	
SOFTWARE-ITEM	SOFTWARE-ITEM OPERATIONAL STATUS CODE	SW_IT_V_OP_ST_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT DENOTES THE OPERATIONAL STATUS OF A PARTICULAR VERSION OF A SOFTWARE-ITEM.	

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
SOFTWARE-ITEM	SOFTWARE-ITEM YEAR 2000 COMPLIANCE DATE	SW_IT_Y2000_C_DT	Dateime	DATE	NULL	No	No	THE DATE BY WHICH A SOFTWARE-ITEM WILL COMPLY WITH YEAR 2000 REQUIREMENTS.	
SOFTWARE-ITEM	SOFTWARE-ITEM YEAR 2000 COMPLIANCE STATUS TEXT	SW_IT_Y2000_CST_TX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES THE CURRENT STATUS OF THE COMPLIANCE OF A SOFTWARE-ITEM WITH YEAR 2000 REQUIREMENTS.	
SOFTWARE-ITEM	SOFTWARE-ITEM YEAR 2000 PHASE NAME	SW_IT_Y2000_PH_NM	String	VARCHAR 2(250)	NULL	No	No	THE NAME OF THE SOFTWARE DEVELOPMENT PHASE OF A SOFTWARE-ITEM RELATIVE TO THE YEAR 2000 REQUIREMENT.	
SOFTWARE-ITEM	SW_IT_COTS_GOTS_CD	SW_IT_COTS_GOTS_CD	String	VARCHAR 2(35)	NULL	No	No		
SOFTWARE-ITEM	SW_IT_ID	SW_IT_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No		
SOFTWARE-ITEM		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
SOFTWARE-ITEM		ARCHIVE_DATE	Dateime	DATE	NULL	No	No		
SOFTWARE-ITEM		CLS_CODE	String	VARCHAR 2(35)	NOT NULL	No	No		
SOFTWARE-ITEM		CREATE_DATE	Dateime	DATE	NOT NULL	No	No		
SOFTWARE-ITEM		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
SOFTWARE-ITEM		MOD_DATE	Dateime	DATE	NOT NULL	No	No		
SOFTWARE-ITEM		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
SOFTWARE-ITEM		SW_IT_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
SYSTEM	C2E_ID	C2E_ID	String	VARCHAR 2(50)	NOT NULL	No	Yes		
SYSTEM	SY_CAPACITY	SY_CAPACITY	Number	NUMBER(10)	NULL	No	No		
SYSTEM	SY_CAPACITY_UNIT	SY_CAPACITY_UNIT	String	VARCHAR 2(5)	NULL	No	No		
SYSTEM	SY_FUNDING_SOURCES	SY_FUNDING_SOURCES	String	VARCHAR 2(2000)	NULL	No	No		
SYSTEM	SY_INFO_ASSURE	SY_INFO_ASSURE	String	VARCHAR 2(50)	NULL	No	No		
SYSTEM	SY_ISSUBSYSTEM	SY_ISSUBSYSTEM	String	CHAR(1)	NULL	No	No		
SYSTEM	SY_NRM_USE_DAYS	SY_NRM_USE_DAYS	Number	NUMBER(1)	NULL	No	No		
SYSTEM	SY_NRM_USE_HRS	SY_NRM_USE_HRS	Number	NUMBER(2)	NULL	No	No		
SYSTEM	SY_PEAK_USE_DAYS	SY_PEAK_USE_DAYS	Number	NUMBER(1)	NULL	No	No		
SYSTEM	SY_PEAK_USE_HRS	SY_PEAK_USE_HRS	Number	NUMBER(2)	NULL	No	No		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
SYSTEM	SY_SEC_PROVIS	SY_SEC_P ROVIS	String	VARCHAR 2(250)	NULL	No	No		
SYSTEM	SY_SRV_PROVIDED	SY_SRV_P ROVIDED	String	VARCHAR 2(10)	NULL	No	No		
SYSTEM	SY_SRV_RMKS	SY_SRV_R MKS	String	VARCHAR 2(250)	NULL	No	No		
SYSTEM	SY_SUP_SRV_PROVIDED	SY_SUP_S RV_PROVI DED	String	VARCHAR 2(7)	NULL	No	No		
SYSTEM	SY_XMT_CLS_CD	SY_XMT_C LS_CD	String	VARCHAR 2(50)	NULL	No	No		
SYSTEM	SYS_ID	SYS_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No		
SYSTEM	SYS_NAME	SYS_NAME	String	VARCHAR 2(250)	NULL	No	No		
SYSTEM	SYSTEM ABBREVIATED NAME	SY_ABBR_ NM	String	VARCHAR 2(50)	NULL	No	No	A SHORTENED FORM OF THE NAME OF A SYSTEM.	
SYSTEM	SYSTEM CLASSIFICATION CODE	SYS_CLS_ CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT DENOTES THE LEVEL OF SECURITY CLASSIFICATION OF A SYSTEM.	
SYSTEM	SYSTEM DESCRIPTION TEXT	SY_DSC_T X	String	VARCHAR 2(2000)	NULL	No	No	(44654) (D) THE TEXT THAT DESCRIBES A SYSTEM.	
SYSTEM	SYSTEM HARD DISK CAPACITY TEXT	SY_HRD_D SK_CP_TX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES THE HARD DISK CAPACITY OF A SYSTEM.	
SYSTEM	SYSTEM IMPLEMENTATION VERSION DESCRIPTION TEXT	SY_IMP_VE R_DTX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A SPECIFIC VERSION OF A SPECIFIC IMPLEMENTATION OF A SYSTEM.	
SYSTEM	SYSTEM IMPLEMENTATION VERSION NAME	SY_IMP_VE R_NM	String	VARCHAR 2(250)	NULL	No	No	THE NAME OF A SPECIFIC VERSION OF A SPECIFIC IMPLEMENTATION OF A SYSTEM.	
SYSTEM	SYSTEM IMPLEMENTATION VERSION OPERATIONAL STATUS CODE	SY_IMP_VE R_OP_ST_ CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT DENOTES THE OPERATIONAL STATUS OF A SPECIFIC VERSION OF A SPECIFIC IMPLEMENTATION OF A SYSTEM.	
SYSTEM	SYSTEM LEGACY MIGRATION SYSTEM CODE	SY_LEG_MI G_CD	<default>	VARCHAR 2(35)	NULL	No	No	THE CODE THAT DENOTES WHETHER OR NOT THE SYSTEM IS A LEGACY SYSTEM TARGETED FOR MIGRATION.	
SYSTEM	SYSTEM MEMORY CAPACITY TEXT	SY_MEM_C P_TX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES THE MEMORY CAPACITY OF A SYSTEM.	
SYSTEM	SYSTEM MOBILITY CODE	SY_MBL_C D	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT DENOTES WHETHER OR NOT A SYSTEM IS MOBILE.	
SYSTEM	SYSTEM NAME	SYSTEM_N AME	String	VARCHAR 2(250)	NULL	No	No	(33207) (D) THE NAME OF A SYSTEM.	
SYSTEM	SYSTEM NETWORK ADDRESS TEXT	SY_NW_AD DR_TX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT REPRESENTS THE NETWORK ADDRESS OF A SYSTEM.	
SYSTEM	SYSTEM NETWORK INTERFACE DESCRIPTION TEXT	SY_NW_IN T_DTX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES THE NETWORK INTERFACE OF A SYSTEM.	
SYSTEM	SYSTEM NETWORK INTERFACE IDENTIFIER	SY_NW_IN T_ID	String	VARCHAR 2(50)	NULL	No	No	THE IDENTIFIER THAT REPRESENTS THE NETWORK INTERFACE OF A SYSTEM.	
SYSTEM	SYSTEM NOMINAL USERS QUANTITY	SY_NML_U SR_QY	Number	NUMBER(15)	NULL	No	No	THE NUMBER OF PERSONS THAT TYPICALLY OPERATE A SPECIFIC SYSTEM AT THE SAME TIME.	

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
SYSTEM	SYSTEM PURPOSE CODE	SY_PRPS_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT DESIGNATES THE OBJECTIVE OF A SPECIFIC SYSTEM.	TBD.
SYSTEM	SYSTEM STATUS CODE	SY_STAT_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT DENOTES THE CURRENT STATUS OF A SYSTEM.	
SYSTEM	SYSTEM UNIT COST AMOUNT	SY_UNIT_COST_AM	Number	NUMBER(15)	NULL	No	No	THE AMOUNT OF THE PLANNING COST OF A SINGLE INSTANCE OF A SYSTEM.	
SYSTEM	SYSTEM-TYPE IDENTIFIER	SY_TY_ID	String	VARCHAR 2(50)	NULL	No	Yes	A class of SYSTEM.	
SYSTEM	UIC_CD	UIC_CD	String	VARCHAR 2(35)	NULL	No	No		
SYSTEM		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
SYSTEM		ARCH_ID	String	VARCHAR 2(50)	NOT NULL	Yes	Yes		
SYSTEM		ARCHIVE_DATE	Date	DATE	NULL	No	No		
SYSTEM		C2E_VID	Number	NUMBER	NOT NULL	No	Yes		
SYSTEM		CLS_CODE	String	VARCHAR 2(35)	NOT NULL	No	No		
SYSTEM		CREATE_DATE	Date	DATE	NOT NULL	No	No		
SYSTEM		CURRENCY_FLAG	String	CHAR(1)	NOT NULL	No	No		
SYSTEM		MOD_STATUS	Date	DATE	NOT NULL	No	No		
SYSTEM		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
SYSTEM		SY_IMP_VID	Number	NUMBER(12)	NULL	No	No		
SYSTEM		SY_TY_VID	Number	NUMBER(12)	NULL	No	Yes		
SYSTEM		SYS_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
SYSTEM CATEGORY	SYS_CAT_ID	SYS_CAT_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No		
SYSTEM CATEGORY	SYS_CAT_NAME	SYS_CAT_NAME	String	VARCHAR 2(250)	NULL	No	No		
SYSTEM CATEGORY	SYS_CAT_PARENT_ID	SYS_CAT_PARENT_ID	String	VARCHAR 2(50)	NULL	No	No		
SYSTEM CATEGORY		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
SYSTEM CATEGORY		ARCHIVE_DATE	Date	DATE	NULL	No	No		
SYSTEM CATEGORY		CLS_CODE	String	VARCHAR 2(35)	NOT NULL	No	No		
SYSTEM CATEGORY		CREATE_DATE	Date	DATE	NOT NULL	No	No		
SYSTEM CATEGORY		CURRENCY_FLAG	String	CHAR(1)	NOT NULL	No	No		
SYSTEM CATEGORY		MOD_DATE	Date	DATE	NOT NULL	No	No		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
SYSTEM CATEGORY		SHADE_FL AG	String	CHAR(1)	NOT NULL	No	No		
SYSTEM CATEGORY		SYS_CAT_ D_TXT	<default>	VARCHAR R2(2000)	NULL	No	No		
SYSTEM SOFTWARE ITEM VERSION	SW_IT_VER_ID	SW_IT_VE R_ID	String	VARCHAR 2(50)	NOT NULL	Yes	Yes		
SYSTEM SOFTWARE ITEM VERSION	SYS_ID	SYS_ID	String	VARCHAR 2(50)	NOT NULL	Yes	Yes		
SYSTEM SOFTWARE ITEM VERSION	SYS_SW_IT_VER_ID	SYS_SW_I T_VER_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No		
SYSTEM SOFTWARE ITEM VERSION		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
SYSTEM SOFTWARE ITEM VERSION		ARCH_ID	String	VARCHAR R2(50)	NOT NULL	Yes	Yes		
SYSTEM SOFTWARE ITEM VERSION		ARCHIVE_ DATE	Date/Time	DATE	NOT NULL	No	No		
SYSTEM SOFTWARE ITEM VERSION		CLS_CODE	String	VARCHAR R2(35)	NOT NULL	No	No		
SYSTEM SOFTWARE ITEM VERSION		CREATE_D ATE	Date/Time	DATE	NOT NULL	No	No		
SYSTEM SOFTWARE ITEM VERSION		CURRENC Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
SYSTEM SOFTWARE ITEM VERSION		INFO_ID	String	VARCHAR R2(50)	NOT NULL	No	No		
SYSTEM SOFTWARE ITEM VERSION		INFO_VID	Number	NUMBER(12)	NOT NULL	No	No		
SYSTEM SOFTWARE ITEM VERSION		MOD_DAT E	Date/Time	DATE	NOT NULL	No	No		
SYSTEM SOFTWARE ITEM VERSION		SHADE_FL AG	String	CHAR(1)	NOT NULL	No	No		
SYSTEM SOFTWARE ITEM VERSION		SW_IT_VE R_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
SYSTEM SOFTWARE ITEM VERSION		SYS_SW_I T_VER_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
SYSTEM SOFTWARE ITEM VERSION		SYS_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
SYSTEM SOFTWARE ITEM VERSION		USER_ID	String	VARCHAR R2(50)	NOT NULL	No	No		
SYSTEM SOFTWARE ITEM VERSION		USER_VID	Number	NUMBER(12)	NOT NULL	No	No		
SYSTEM TRANSMISSION INFO	ANTN_TY_NM	ANTN_TY_ NM	String	VARCHAR 2(50)	NOT NULL	No	No		
SYSTEM TRANSMISSION INFO	COMM_MODE	COMM_MO DE	String	VARCHAR 2(250)	NOT NULL	No	No		
SYSTEM TRANSMISSION INFO	DATA_RATE	DATA_RAT E	Number	NUMBER(12)	NOT NULL	No	No		
SYSTEM TRANSMISSION INFO	NUM_CHANNELS	NUM_CHA NNELS	Number	NUMBER(12)	NOT NULL	No	No		
SYSTEM TRANSMISSION INFO	OH_RATE	OH_RATE	Number	NUMBER(12)	NOT NULL	No	No		
SYSTEM TRANSMISSION INFO	RX_FREQ_DISP_UNITS	RX_FREQ_ DISP_UNITS	String	VARCHAR 2(5)	NOT NULL	No	No		

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Annex D (Table D-1, User Accessible Entities)

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JCAPS 2.1 Attribute Specifications

Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
SYSTEM TRANSMISSION INFO	RX_FREQ_HZ	RX_FREQ_HZ	Number	NUMBER(15)	NULL	No	No		
SYSTEM TRANSMISSION INFO	SYS_ID	SYS_ID	String	VARCHAR2(50)	NOT NULL	Yes	Yes		
SYSTEM TRANSMISSION INFO	TX_FREQ_DISP_UNITS	TX_FREQ_DISP_UNITS	String	VARCHAR2(5)	NULL	No	No		
SYSTEM TRANSMISSION INFO	TX_FREQ_HZ	TX_FREQ_HZ	Number	NUMBER(15)	NULL	No	No		
SYSTEM TRANSMISSION INFO	AK_ID	AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
SYSTEM TRANSMISSION INFO	ARCH_ID	ARCH_ID	String	VARCHAR2(50)	NOT NULL	Yes	Yes		
SYSTEM TRANSMISSION INFO	ARCHIVE_DATE	ARCHIVE_DATE	Date	DATE	NULL	No	No		
SYSTEM TRANSMISSION INFO	CLS_CODE	CLS_CODE	String	VARCHAR2(35)	NOT NULL	No	No		
SYSTEM TRANSMISSION INFO	CREATE_DATE	CREATE_DATE	Date	DATE	NOT NULL	No	No		
SYSTEM TRANSMISSION INFO	CURRENT_FLAG	CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
SYSTEM TRANSMISSION INFO	MOD_DATE	MOD_DATE	Date	DATE	NOT NULL	No	No		
SYSTEM TRANSMISSION INFO	SHADE_FLAG	SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
SYSTEM TRANSMISSION INFO	SYS_VID	SYS_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
SYSTEM-ASSOCIATION	REL_SYS_ID	SYS_ID	String	VARCHAR2(50)	NOT NULL	Yes	Yes		
SYSTEM-ASSOCIATION	REL_TYPE	REL_TYPE	String	CHAR(1)	NULL	No	No		
SYSTEM-ASSOCIATION	SYS_ID	SYS_ID	String	VARCHAR2(50)	NOT NULL	Yes	Yes		
SYSTEM-ASSOCIATION	SYSTEM-ASSOCIATION DESCRIPTION TEXT	SY_ASN_DESC_TX	String	VARCHAR2(2000)	NULL	No	No	(44669) (D) THE TEXT THAT DESCRIBES THE NATURE OF THE ASSOCIATION BETWEEN TWO SYSTEMS.	
SYSTEM-ASSOCIATION	SYSTEM-ASSOCIATION IDENTIFIER	SY_ASN_ID	String	VARCHAR2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A SYSTEM-ASSOCIATION.	
SYSTEM-ASSOCIATION	SYSTEM-ASSOCIATION INTERFACE TYPE CODE	SY_ASN_INTF_CD	String	VARCHAR2(35)	NULL	No	No	THE CODE THAT DESIGNATES THE CLASS OF INTEROPERATING RELATIONSHIP BETWEEN TWO SYSTEMS IN A SYSTEM-ASSOCIATION.	TBD.
SYSTEM-ASSOCIATION	SYSTEM-ASSOCIATION INTEROPERABILITY LEVEL CODE	SY_ASN_INTROP_LVL_CD	String	VARCHAR2(35)	NULL	No	No	THE CODE THAT DESIGNATES THE APPLICABLE KIND OF INTEROPERABILITY BETWEEN TWO SYSTEMS.	
SYSTEM-ASSOCIATION	SYSTEM-ASSOCIATION NAME	SY_ASN_NAME	String	VARCHAR2(250)	NULL	No	No	THE CODE THAT DENOTES THE KIND OF SYSTEM-ASSOCIATION.	
SYSTEM-ASSOCIATION	SYSTEM-ASSOCIATION TYPE CODE	SY_ASN_TY_CD	String	VARCHAR2(35)	NULL	No	No	Is a revision of; is an upgrade planned for; migrates from; replaces; is installed in	
SYSTEM-ASSOCIATION		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		

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Entity Name	Attribute Name	Col. Nm. ARCH_ID	Dom. String	Datatype VARCHAR2(50)	Null	PK	FK	Attribute Definition	Note
SYSTEM-ASSOCIATION		ARCH_ID	String	VARCHAR2(50)	NULL	Yes	Yes		
SYSTEM-ASSOCIATION		ARCHIVE_DATE	Date	DATE	NULL	No	No		
SYSTEM-ASSOCIATION		CLS_CODE	String	VARCHAR2(35)	NOT NULL	No	No		
SYSTEM-ASSOCIATION		CREATE_DATE	Date	DATE	NOT NULL	No	No		
SYSTEM-ASSOCIATION		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
SYSTEM-ASSOCIATION		MOD_DATE	Date	DATE	NOT NULL	No	No		
SYSTEM-ASSOCIATION		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
SYSTEM-ASSOCIATION		SYS_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
SYSTEM-ASSOCIATION		SYS_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
SYSTEM-TYPE		SYS_ISSUBSYSTEM	String	CHAR(1)	NULL	No	No		
SYSTEM-TYPE		SYS_TY_ABBR_NM	String	VARCHAR2(50)	NULL	No	No		
SYSTEM-TYPE		SYS_TY_CD	String	CHAR(4)	NULL	No	No		
SYSTEM-TYPE		SYS_TY_MFG_MOD_TXT	String	VARCHAR2(50)	NULL	No	No		
SYSTEM-TYPE		SYS_TY_MFG_NAME	String	VARCHAR2(50)	NULL	No	No		
SYSTEM-TYPE		SYS_TY_NM	String	VARCHAR2(250)	NULL	No	No		
SYSTEM-TYPE		SYS_TY_SFT_INF_TXT	String	VARCHAR2(2000)	NULL	No	No		
SYSTEM-TYPE		SYS_TY_STAT_CD	String	VARCHAR2(20)	NULL	No	No		
SYSTEM-TYPE		SYS_TY_Y2K_COMP_CD	String	CHAR(3)	NULL	No	No		
SYSTEM-TYPE		SYS_CAT_ID	String	VARCHAR2(50)	NULL	No	Yes		
SYSTEM-TYPE		SYS_MODEL	String	VARCHAR2(50)	NULL	No	No		
SYSTEM-TYPE		SYSTEM-TYPE DESCRIPTION TEXT IDENTIFIER	String	VARCHAR2(2000)	NULL	No	No	(33304) (D) THE TEXT THAT DESCRIBES A SYSTEM TYPE.	
SYSTEM-TYPE		SYSTEM-TYPE NAME	String	VARCHAR2(50)	NOT NULL	Yes	No	(33216) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM TYPE.	
SYSTEM-TYPE		Y2K_COMP_LVL_CD	String	VARCHAR2(250)	NULL	No	No	(33217) (D) THE NAME OF A SYSTEM TYPE.	Information Processing System; Communication System
SYSTEM-TYPE		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
SYSTEM-TYPE		ARCHIVE_DATE	Date	DATE	NULL	No	No		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
SYSTEM-TYPE		CLS_CODE	String	VARCHAR R2(35)	NOT NULL	No	No		
SYSTEM-TYPE		CREATE_DATE	DateTime	DATE	NOT NULL	No	No		
SYSTEM-TYPE		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
SYSTEM-TYPE		MOD_DATE	DateTime	DATE	NOT NULL	No	No		
SYSTEM-TYPE		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
SYSTEM-TYPE		SY_TV_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
UNIVERSAL-JOINT-TASK-LIST-TASK	UJTL_HIER_NUM_ID	UJTL_HIER_NUM_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No		
UNIVERSAL-JOINT-TASK-LIST-TASK	UJTL_LVL_WAR_CD	UJTL_LVL_WAR_CD	String	CHAR(2)	NOT NULL	Yes	No		
UNIVERSAL-JOINT-TASK-LIST-TASK	UJTL_TASK_ID	UJTL_TASK_ID	String	VARCHAR 2(50)	NULL	No	No		
UNIVERSAL-JOINT-TASK-LIST-TASK	UNIVERSAL-JOINT-TASK-LIST-TASK DESCRIPTION TEXT	UJTL_TASK_K_DTX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A UNIVERSAL-JOINT-TASK-LIST-TASK.	
UNIVERSAL-JOINT-TASK-LIST-TASK	UNIVERSAL-JOINT-TASK-LIST-TASK HIERARCHY SEQUENCE CODE	UJTL_TASK_K_HIER_SEQ_CD	<default>	CHAR(10)	NOT NULL	Yes	No	THE CODE THAT DENOTES THE SEQUENCE OF A SPECIFIC TASK IN THE HIERARCHY OF UNIVERSAL-JOINT-TASK-LIST-TASKS.	1
UNIVERSAL-JOINT-TASK-LIST-TASK	UNIVERSAL-JOINT-TASK-LIST-TASK NAME	UJTL_TASK_K_NM	String	VARCHAR 2(100)	NULL	No	No	THE NAME OF A UNIVERSAL-JOINT-TASK-LIST-TASK.	
UNIVERSAL-JOINT-TASK-LIST-TASK	UNIVERSAL-JOINT-TASK-LIST-TASK NOTE TEXT	UJTL_TASK_K_NOTE_TXT	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT IS A NOTE FOR A SPECIFIC UNIVERSAL-JOINT-TASK-LIST-TASK.	
UNIVERSAL-JOINT-TASK-LIST-TASK	UNIVERSAL-JOINT-TASK-LIST-TASK REFERENCE SOURCE TEXT	UJTL_TASK_K_REF_TX	String	VARCHAR 2(100)	NULL	No	No	THE SOURCE OF A REFERENCE FOR A SPECIFIC TASK IN THE UNIVERSAL-JOINT-TASK-LIST.	
UNIVERSAL-JOINT-TASK-LIST-TASK	UNIVERSAL-JOINT-TASK-LIST-TASK VERSION IDENTIFIER	UJTL_1	<default>	CHAR(10)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A SPECIFIC VERSION OF A UNIVERSAL-JOINT-TASK-LIST-TASK.	
UNIVERSAL-JOINT-TASK-LIST-TASK		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
UNIVERSAL-JOINT-TASK-LIST-TASK		ARCHIVE_DATE	DateTime	DATE	NULL	No	No		
UNIVERSAL-JOINT-TASK-LIST-TASK		CLS_CODE	String	VARCHAR R2(35)	NOT NULL	No	No		
UNIVERSAL-JOINT-TASK-LIST-TASK		CREATE_DATE	DateTime	DATE	NULL	No	No		
UNIVERSAL-JOINT-TASK-LIST-TASK		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
UNIVERSAL-JOINT-TASK-LIST-TASK		MOD_DATE	DateTime	DATE	NOT NULL	No	No		
UNIVERSAL-JOINT-TASK-LIST-TASK		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
UNIVERSAL-JOINT-TASK-LIST-TASK		UJTL_HIER_VID	Number	NUMBER(12)	NOT NULL	Yes	No		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
UNIVERSAL-JOINT-TASK-LIST-TASK		UJTL_LVL_WAR_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
USER CODE	USER_CD	USER_CD	String	CHAR(1)	NOT NULL	Yes	No		
USER CODE	USER_DESC	USER_DESC	String	VARCHAR2(50)	NULL	No	No		
USER CODE		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
USER CODE		ARCHIVE_DATE	Date	DATE	NULL	No	No		
USER CODE		CLS_CODE	String	VARCHAR2(35)	NOT NULL	No	No		
USER CODE		CREATE_DATE	Date	DATE	NOT NULL	No	No		
USER CODE		CURRENT_Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
USER CODE		MOD_DATE	Date	DATE	NOT NULL	No	No		
USER CODE		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
USER CODE		USER_CD_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
USER_DEF_PROP_DICT	PARENT_PROPERTY_ID	PARENT_PROPERTY_ID	String	VARCHAR2(50)	NULL	No	No		
USER_DEF_PROP_DICT	PROPERTY_DISPLAY_ORDER	PROPERTY_DISPLAY_ORDER	Number	NUMBER	NULL	No	No		
USER_DEF_PROP_DICT	PROPERTY_ENUM_ALL_OW_NEW	PROPERTY_ENUM_ALL_OW_NEW	String	VARCHAR2(1)	NULL	No	No		
USER_DEF_PROP_DICT	PROPERTY_ID	PROPERTY_ID	String	VARCHAR2(50)	NOT NULL	Yes	No		
USER_DEF_PROP_DICT	PROPERTY_NAME	PROPERTY_NAME	String	VARCHAR2(50)	NOT NULL	No	No		
USER_DEF_PROP_DICT	PROPERTY_OBJECT_TYPE_PROGID	PROPERTY_OBJECT_TYPE_PROGID	String	VARCHAR2(50)	NOT NULL	No	No		
USER_DEF_PROP_DICT	PROPERTY_TYPE	PROPERTY_TYPE	Number	NUMBER	NOT NULL	No	No		
USER_DEF_PROP_DICT	PROPERTY_VISIBLE	PROPERTY_VISIBLE	String	VARCHAR2(1)	NULL	No	No		
USER_DEF_PROP_DICT		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
USER_DEF_PROP_DICT		ARCHIVE_DATE	Date	DATE	NULL	No	No		
USER_DEF_PROP_DICT		CLS_CODE	String	VARCHAR2(35)	NOT NULL	No	No		
USER_DEF_PROP_DICT		CREATE_DATE	Date	DATE	NOT NULL	No	No		
USER_DEF_PROP_DICT		CURRENT_Y_FLAG	String	CHAR(1)	NOT NULL	No	No		

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Entity Name	Attribute Name	Col. Nim.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
USER_DEF_PROP_DI		MOD_DATE	Date	DATE	NOT NULL	No	No		
USER_DEF_PROP_DI		SHADE_FL	String	CHAR(1)	NOT NULL	No	No		
USER_DEF_PROP_DI		ENUM_VAL	String	VARCHAR(255)	NOT NULL	Yes	No		
USER_DEF_PROP_DI	PROPERTY_ID	PROPERTY_ID	String	VARCHAR(255)	NOT NULL	Yes	Yes		
USER_DEF_PROPS	ARCH_ID	ARCH_ID	String	VARCHAR(255)	NOT NULL	Yes	No		
USER_DEF_PROPS	OBJECT_ID	OBJECT_ID	String	VARCHAR(255)	NOT NULL	Yes	No		
USER_DEF_PROPS	PROPERTY_ID	PROPERTY_ID	String	VARCHAR(255)	NOT NULL	Yes	Yes		
USER_DEF_PROPS	PROPERTY_VALUE	PROPERTY_VALUE	String	VARCHAR(255)	NOT NULL	No	No		
USER_DEF_PROPS	AK_ID	AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
USER_DEF_PROPS	ARCHIVE_DATE	ARCHIVE_DATE	Date	DATE	NOT NULL	No	No		
USER_DEF_PROPS	CLS_CODE	CLS_CODE	String	VARCHAR(255)	NOT NULL	No	No		
USER_DEF_PROPS	CREATE_DATE	CREATE_DATE	Date	DATE	NOT NULL	No	No		
USER_DEF_PROPS	CURRENT_FLAG	CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
USER_DEF_PROPS	MOD_DATE	MOD_DATE	Date	DATE	NOT NULL	No	No		
USER_DEF_PROPS	SHADE_FL	SHADE_FL	String	CHAR(1)	NOT NULL	No	No		

Table D-2. Attribute Specifications for Implementation-Unique Entities

Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
DATABASE_VERSION	MAXIMUM SYSTEM HIGH CLASSIFICATION	MAX_SYS_HIGH_CL	String	VARCHAR 2(35)	NULL	No	No	THE MAXIMUM ALLOWABLE CLASSIFICATION OF ANY DATA TO BE STORED IN THE CURRENT DATABASE	
DATABASE_VERSION	USER LIST IDENTIFIER	JSVR_LST_ID	String	CHAR(4)	NOT NULL	No	No	THE SID OF THE CURRENT DATABASE	
DATABASE_VERSION	USER LIST NAME	JSVR_LST_NM	String	VARCHAR 2(80)	NOT NULL	No	No	THE ENGLISH NAME OF THE CURRENT DATABASE	
DATABASE_VERSION	DATABASE VERSION	DB_VERSION	String	VARCHAR 2(35)	NOT NULL	Yes	No	THE VERSION NUMBER OF THE CURRENT DATABASE. THIS VERSION NUMBER IS CHECKED BY THE JCAPS APPLICATION SERVER FOR COMPATIBILITY	
DATABASE_VERSION	DATABASE COMMENTS	DB_COMMENTS	String	VARCHAR 2(2000)	NOT NULL	No	No	COMMENTS ASSOCIATED WITH THIS DATABASE VERSION	
DOCUMENT MODEL OBJECT ASSOCIATION	INFORMATION EXCHANGE REQUIREMENT IDENTIFIER	IER_ID	String	VARCHAR 2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS AN INFORMATION EXCHANGE REQUIREMENT	
DOCUMENT MODEL OBJECT ASSOCIATION	DOCUMENT MODEL OBJECT IDENTIFIER	DOC_MDL_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A DOCUMENT-MODEL OBJECT RELATIONSHIP	
DOCUMENT MODEL OBJECT ASSOCIATION	DOCUMENT MODEL OBJECT TYPE	DOC_MDL_TYPE	String	VARCHAR 2(35)	NULL	No	No	THE IDENTIFIER THAT REPRESENTS A MODEL OBJECT (AFV2 COMPONENT)	
DOCUMENT MODEL OBJECT ASSOCIATION	DOCUMENT IDENTIFIER	DOC_ID	String	VARCHAR 2(50)	NOT NULL	Yes	Yes	THE IDENTIFIER THAT REPRESENTS A DOCUMENT (PRODUCT)	
DOCUMENT MODEL OBJECT ASSOCIATION		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
DOCUMENT MODEL OBJECT ASSOCIATION		ARCH_ID	String	VARCHAR 2(50)	NULL	No	Yes		
DOCUMENT MODEL OBJECT ASSOCIATION		ARCHIVE_DATE	Date	DATE	NULL	No	No		
DOCUMENT MODEL OBJECT ASSOCIATION		CLS_CODE	String	VARCHAR 2(35)	NOT NULL	No	No		
DOCUMENT MODEL OBJECT ASSOCIATION		CREATE_DATE	Date	DATE	NOT NULL	No	No		
DOCUMENT MODEL OBJECT ASSOCIATION		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
DOCUMENT MODEL OBJECT ASSOCIATION		D_MASK	String	VARCHAR 2(255)	NULL	No	No		
DOCUMENT MODEL OBJECT ASSOCIATION		DOC_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
DOCUMENT MODEL OBJECT ASSOCIATION		IER_VID	Number	NUMBER(12)	NULL	No	Yes		
DOCUMENT MODEL OBJECT ASSOCIATION		MOD_DATE	Date	DATE	NOT NULL	No	No		
DOCUMENT MODEL OBJECT ASSOCIATION		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
DRAW POINTS	Y	Y	Number	NUMBER(6)	NULL	No	No	Y-POSITION OF THE POINT	
DRAW POINTS	X	X	Number	NUMBER(6)	NULL	No	No	X-POSITION OF THE POINT	

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
DRAW POINTS	POINT ORDER	PT_ORDE R	Number	NUMBER(4)	NOT NULL	Yes	No	SORTED ORDER OF THE POINT -- SINCE EACH POLYGON OR LINE CAN HAVE MULTIPLE POINTS, THIS HOLDS THE ORDER IN WHICH TO DRAW THE POINTS	
DRAW POINTS	DRAW OBJECT IDENTIFIER	U_ID	String	VARCHAR 2(50)	NOT NULL	Yes	Yes	A FOREIGN KEY TO THE DRAWOBJECT TABLE; HOLDS THE IDENTIFIER OF THE LINE OR POLYGON TO WHICH THIS POINT RECORD PERTAINS	
DRAW POINTS		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
DRAW POINTS		ARCHIVE_ DATE	Datetim e	DATE	NULL	No	No		
DRAW POINTS		CLS_COD E	String	VARCHA R2(35)	NOT NULL	No	No		
DRAW POINTS		CREATE_ DATE	Datetim e	DATE	NOT NULL	No	No		
DRAW POINTS		CURRENC Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
DRAW POINTS		MOD_DAT E	Datetim e	DATE	NOT NULL	No	No		
DRAW POINTS		SHADE_F LAG	String	CHAR(1)	NOT NULL	No	No		
DRAW POINTS		U_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
DRAWGRPMEMBERS	GROUP MEMBER LETIDRAW IDENTIFIER	MEMBER_ LETID	Number	NUMBER(10)	NOT NULL	Yes	No	A NUMBER REPRESENTING THE LETIDRAW IDENTIFIER OF THE OBJECT THAT IS A MEMBER OF THIS GROUP	
DRAWGRPMEMBERS	DRAW OBJECT IDENTIFIER	U_ID	String	VARCHAR 2(50)	NOT NULL	Yes	Yes	A FOREIGN KEY TO THE DRAWOBJECT TABLE HOLDING THE IDENTIFIER OF THE GROUP TO WHICH THIS RECORD PERTAINS	
DRAWGRPMEMBERS		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
DRAWGRPMEMBERS		ARCHIVE_ DATE	Datetim e	DATE	NULL	No	No		
DRAWGRPMEMBERS		CLS_COD E	String	VARCHA R2(35)	NOT NULL	No	No		
DRAWGRPMEMBERS		CREATE_ DATE	Datetim e	DATE	NOT NULL	No	No		
DRAWGRPMEMBERS		CURRENC Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
DRAWGRPMEMBERS		MOD_DAT E	Datetim e	DATE	NOT NULL	No	No		
DRAWGRPMEMBERS		SHADE_F LAG	String	CHAR(1)	NOT NULL	No	No		
DRAWGRPMEMBERS		U_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
DRAW-MODEL OBJECT ASSOCIATION	MODEL TYPE	MODEL_T YPE	Number	NUMBER(10)	NOT NULL	No	No	THE TYPE OF MODEL OBJECT (AFV2 COMPONENT)	
DRAW-MODEL OBJECT ASSOCIATION	MODEL OBJECT IDENTIFIER	MODEL_ID	String	VARCHA R2(50)	NULL	No	No	THE IDENTIFIER THAT REPRESENTS A MODEL OBJECT (AFV2 COMPONENT)	
DRAW-MODEL OBJECT ASSOCIATION	DRAW OBJECT IDENTIFIER	U_ID	String	VARCHA R2(50)	NOT NULL	Yes	Yes	THE IDENTIFIER THAT REPRESENTS DRAW INFORMATION	
DRAW-MODEL OBJECT ASSOCIATION		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
DRAW-MODEL OBJECT ASSOCIATION		ARCHIVE_ DATE	Date	DATE	NULL	No	No		
DRAW-MODEL OBJECT ASSOCIATION		CLS_CODE	String	VARCHAR2(35)	NOT NULL	No	No		
DRAW-MODEL OBJECT ASSOCIATION		CREATE_DATE	Date	DATE	NOT NULL	No	No		
DRAW-MODEL OBJECT ASSOCIATION		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
DRAW-MODEL OBJECT ASSOCIATION		MOD_DATE	Date	DATE	NOT NULL	No	No		
DRAW-MODEL OBJECT ASSOCIATION		MODEL_VIEW	Number	NUMBER(12)	NULL	No	No		
DRAW-MODEL OBJECT ASSOCIATION		SHADE_FACTOR	String	CHAR(1)	NOT NULL	No	No		
DRAW-MODEL OBJECT ASSOCIATION		U_ID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
DRAW-MODEL OBJECT ASSOCIATION	Z-ORDER	ZORDER	Number	NUMBER(10)	NULL	No	No	THE Z-ORDER OF THIS OBJECT IN ITS DOCUMENT; THE ITEM WITH THE LOWEST Z-ORDER (0) IS DRAWN FIRST (ON THE BOTTOM), AND THE HIGHEST IS DRAWN LAST (ON THE TOP OF THE DIAGRAM)	
DRAWOBJECT	VISUAL REPRESENTATION IDENTIFIER	VRS_ID	String	VARCHAR2(50)	NULL	No	No	IF THIS OBJECT IS A PICTURE, THIS FIELD IS AN IDENTIFIER TO THE VISUAL REPRESENTATION TABLE WHICH HOLDS THE ENCODED WINDOWS METAFILE DATA OF THIS PICTURE	
DRAWOBJECT	TOP	TOP	Number	NUMBER(10)	NULL	No	No	TOP COORDINATE OF THE DRAW OBJECT (IF A SHAPE)	
DRAWOBJECT	TO LET/DRAW IDENTIFIER	TO_LET/D	Number	NUMBER(10)	NULL	No	No	THE LET/DRAW IDENTIFIER THAT REPRESENTS THE OBJECT AT THE "TO" SIDE OF THIS OBJECT IF THIS OBJECT IS A LINE; 0 INDICATES NO OBJECT	
DRAWOBJECT	TO ARROWHEAD TYPE	TOARROWHEAD TYPE	Number	NUMBER(10)	NULL	No	No	A NUMBER REPRESENTING THE TYPE OF ARROWHEAD AT THE "FROM" SIDE OF THE LINE (IF THIS IS A LINE OBJECT) 0 - NONE 1 - OPEN ARROW 2 - FILLED ARROW 3 - CIRCLE 4 - DIAMOND 5 - SQUARE	
DRAWOBJECT	TO ARROWHEAD SIZE	TOARROWHEAD SIZE	Number	NUMBER(10)	NULL	No	No	NOT CURRENTLY USED	
DRAWOBJECT	STATUS TYPE	STATUS TYPE	String	VARCHAR2(10)	NULL	No	No		
DRAWOBJECT	SIZE BORDER TO TEXT FLAG	SIZEBORDER TO TEXT	Number	NUMBER(1)	NULL	No	No	IF THIS IS NON-ZERO, AND THIS IS A GROUP, THEN A BORDER OBJECT (RECT OR OVAL) AROUND ANY TEXT IN THE GROUP WILL BE RESIZED WHEN THE TEXT IN THE GROUP CHANGES	1
DRAWOBJECT	SHADOW OFFSET - Y	SHADOW OFFSET Y	Number	NUMBER(10)	NULL	No	No	Y-OFFSET OF THE SHADOW IF THIS OBJECT HAS A SHADOW	
DRAWOBJECT	SHADOW OFFSET - X	SHADOW OFFSET X	Number	NUMBER(10)	NULL	No	No	X-OFFSET OF THE SHADOW IF THIS OBJECT HAS A SHADOW	
DRAWOBJECT	SHADOW COLOR	SHADOW COLOR	Number	NUMBER(10)	NULL	No	No	RGB SHADOW COLOR IF THIS OBJECT HAS A SHADOW	
DRAWOBJECT	RIGHT	RIGHT	Number	NUMBER(10)	NULL	No	No	RIGHT COORDINATE OF THE DRAW OBJECT (IF A SHAPE)	
DRAWOBJECT	OUTLINE COLOR	OUTLINE COLOR	Number	NUMBER(10)	NULL	No	No	RGB OUTLINE COLOR IF THIS IS AN OUTLINABLE OBJECT	

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
DRAWOBJECT	LINE WIDTH	LINEWIDTH	Number	NUMBER(10)	NULL	No	No	IF THIS DRAW OBJECT IS A LINE OR AN OUTLINABLE OBJECT, THIS FIELD HOLDS THE WIDTH OF THE LINE OR OUTLINE	
DRAWOBJECT	LINE TYPE	LINE TYPE	Number	NUMBER(10)	NULL	No	No	A NUMBER REPRESENTING THE TYPE OF LINE TO DRAW (WHETHER THIS IS A LINE OR AN OUTLINED OBJECT) 0 - SOLID 1 - DASH 2 - DOT 3 - DASH-DOT 4 - DASH-DOT-DOT	
DRAWOBJECT	LINE BENDING TYPE	BENDTYPE	Number	NUMBER(1)	NULL	No	No	0 - NORMAL 1 - 90-DEGREE BENDING 2 - BEZIER-CURVED	
DRAWOBJECT	LETIDRAW IDENTIFIER	LETIDUID	Number	NUMBER(10)	NULL	No	No	INTERNAL NUMERIC LETIDRAW IDENTIFIER OF THIS DRAW OBJECT	
DRAWOBJECT	LEFT	LEFT	Number	NUMBER(10)	NULL	No	No	LEFT COORDINATE OF THE DRAW OBJECT (IF A SHAPE)	
DRAWOBJECT	FROM LETIDRAW IDENTIFIER	FROM_LETIDUID	Number	NUMBER(10)	NULL	No	No	THE LETIDRAW IDENTIFIER THAT REPRESENTS THE OBJECT AT THE "FROM" SIDE OF THIS OBJECT IF THIS OBJECT IS A LINE; 0 INDICATES NO OBJECT	
DRAWOBJECT	FROM ARROWHEAD TYPE	FROMARROWHEADTYPE	Number	NUMBER(10)	NULL	No	No	A NUMBER REPRESENTING THE TYPE OF ARROWHEAD AT THE "FROM" SIDE OF THE LINE (IF THIS IS A LINE OBJECT) 0 - NONE 1 - OPEN ARROW 2 - FILLED ARROW 3 - CIRCLE 4 - DIAMOND 5 - SQUARE	
DRAWOBJECT	FROM ARROWHEAD SIZE	FROMARROWHEADSIZE	Number	NUMBER(10)	NULL	No	No	RGB FILL COLOR IF THIS IS A FILLABLE OBJECT	
DRAWOBJECT	FILL COLOR	FILLCOLOR	Number	NUMBER(10)	NULL	No	No	ENUMERATED TYPE OF THIS DRAW OBJECT: 0 - TEXT 1 - RECTANGLE 2 - OVAL 3 - GROUP 4 - POLYGON 5 - LINE 6 - PICTURE 7 - CONNECTION POINT	
DRAWOBJECT	DRAW OBJECT TYPE	TYPE	Number	NUMBER(5)	NOT NULL	No	No	THE IDENTIFIER THAT REPRESENTS A DRAW OBJECT	
DRAWOBJECT	DRAW OBJECT IDENTIFIER	U_ID	String	VARCHAR2(50)	NOT NULL	Yes	No	IDENTIFIER OF THE DOCUMENT IN WHICH THIS DRAW OBJECT RESIDES	
DRAWOBJECT	CONTAINING DOCUMENT IDENTIFIER	DOC_ID	String	VARCHAR2(50)	NOT NULL	No	Yes	NOT USED CURRENTLY	
DRAWOBJECT	CONNECTION POINT NAME	CPNAME	String	VARCHAR2(100)	NULL	No	No	BOTTOM COORDINATE OF THE DRAW OBJECT (IF A SHAPE)	
DRAWOBJECT	BOTTOM	BOTTOM	Number	NUMBER(10)	NULL	No	No	ROTATION ANGLE OF THIS OBJECT IN TENTHS OF A DEGREE	
DRAWOBJECT	ANGLE	ANGLE10THS	Number	NUMBER(10)	NULL	No	No		
DRAWOBJECT		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
DRAWOBJECT		ARCHIVE_DATE	Date	DATE	NULL	No	No		
DRAWOBJECT		CLS_CODE	String	VARCHAR2(35)	NOT NULL	No	No		
DRAWOBJECT		CREATE_DATE	Date	DATE	NOT NULL	No	No		
DRAWOBJECT		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
DRAWOBJECT		D_MASK	String	VARCHAR2(255)	NULL	No	No		
DRAWOBJECT		DOC_VID	Number	NUMBER(12)	NOT NULL	No	Yes		

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Entity Name	Attribute Name	Col. Nm. MOD_DAT E	Dom. Datetim e	Datatype DATE	Null	PK	FK	Attribute Definition	Note
DRAWOBJECT		SHADE_F LAG	String	CHAR(1)	NOT NULL	No	No		
DRAWOBJECT		U_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
DRAWOBJECT		VRS_VID	Number	NUMBER(12)	NULL	No	No		
DRAWTEXT	UNDERLINE	UNDERLIN E	Number	NUMBER(1)	NULL	No	No	0 - NOT UNDERLINED 1 - UNDERLINED	
DRAWTEXT	TEXTCOLOR	TEXTCOL OR	Number	NUMBER(10)	NULL	No	No	RGB COLOR VALUE OF THE TEXT	
DRAWTEXT	TEXT	TEXT	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT TO DRAW	
DRAWTEXT	STRIKEOUT	STRIKEOU T	Number	NUMBER(1)	NULL	No	No	0 - NOT STRUCK OUT 1 - STRUCK OUT	
DRAWTEXT	LONGESTLOC	LONGEST LOC	Number	NUMBER(10)	NULL	No	No	0-BASED INDEX OF THE STARTING POINT FOR THE LONGEST LINE OF TEXT IN THIS TEXT (USED TO DETERMINE WHERE TO PLACE LINE BREAKS)	
DRAWTEXT	LONGESTLEN	LONGEST LEN	Number	NUMBER(10)	NULL	No	No	LENGTH OF THE LONGEST STRING IN THIS BLOCK OF TEXT (USED TO DETERMINE WHERE TO PLACE LINE BREAKS)	
DRAWTEXT	JUSTIFY	JUSTIFY	String	VARCHAR 2(10)	NULL	No	No	L - LEFT JUSTIFY THE TEXT C - CENTER JUSTIFY THE TEXT R - RIGHT JUSTIFY THE TEXT	
DRAWTEXT	ITALIC	ITALIC	Number	NUMBER(1)	NULL	No	No	0 - NOT ITALIC 1 - ITALIC	
DRAWTEXT	FONT POINT SIZE	FONT_PT PT	Number	NUMBER(5)	NULL	No	No	POINT SIZE OF THE FONT TO DRAW THE TEXT WITH	
DRAWTEXT	FONT	FONT	String	VARCHAR 2(30)	NULL	No	No	NAME OF THE WINDOWS FONT TO DRAW THE TEXT WITH	
DRAWTEXT	DRAW OBJECT IDENTIFIER	U_ID	String	VARCHAR 2(50)	NOT NULL	Yes	Yes		
DRAWTEXT	CHARSET	CHARSET	Number	NUMBER(5)	NULL	No	No	NUMBER REPRESENTING THE WINDOWS CHARACTER SET (SEE WINDOWS DOCUMENTATION)	
DRAWTEXT	BOLD	BOLD	Number	NUMBER(1)	NULL	No	No	0 - NOT BOLD 1 - BOLD	
DRAWTEXT	ANNOTLOC	ANNOTLO C	String	VARCHAR 2(5)	NULL	No	No		
DRAWTEXT	ANNOT_LETUID	ANNOT_L ETUID	Number	NUMBER(10)	NULL	No	No		
DRAWTEXT		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
DRAWTEXT		ARCHIVE_DATE	Datetim e	DATE	NULL	No	No		
DRAWTEXT		CLS_CODE	String	VARCHA R2(35)	NOT NULL	No	No		
DRAWTEXT		CREATE_DATE	Datetim e	DATE	NOT NULL	No	No		
DRAWTEXT		CURRENT_Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
DRAWTEXT		MOD_DATE	Datetim e	DATE	NOT NULL	No	No		

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Annex D (Table D-2, Implementation-Unique Entities)

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JCAPS 2.1 Attribute Specifications

Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
DRAWTEXT		SHADE_F LAG	String	CHAR(1)	NOT NULL	No	No		
DRAWTEXT		U_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
QUERIES	QUERY_USER_ID	QUERY_U SER_ID	String	VARCHAR 2(50)	NOT NULL	No	No		
QUERIES	QUERY TYPE	QUERY_T YPE	String	VARCHAR 2(50)	NOT NULL	No	No	THE COMPONENT TYPE BEING QUERIED	
QUERIES	QUERY NAME	QUERY_N AME	String	VARCHAR 2(100)	NOT NULL	No	No	THE NAME OF THE QUERY	
QUERIES	QUERY IDENTIFIER	U_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A USER CREATED DATABASE QUERY	
QUERIES		AK_ID	Number	NUMBER(12)	NULL	No	No		
QUERIES		ARCHIVE_ DATE	Datetime	DATE	NULL	No	No		
QUERIES		CLS_COD E	String	VARCHA R2(35)	NULL	No	No		
QUERIES		CREATE_ DATE	Datetime	DATE	NULL	No	No		
QUERIES		CURRENC Y_FLAG	String	CHAR(1)	NULL	No	No		
QUERIES		MOD_DAT E	Datetime	DATE	NULL	No	No		
QUERIES		SHADE_F LAG	String	CHAR(1)	NULL	No	No		
QUERIES		U_VID	Number	NUMBER(12)	NOT NULL	No	No		
QUERY ENTRIES	QUERY VALUE	QUERY_V ALUE	String	VARCHAR 2(200)	NULL	No	No	THE VALUE BEING TESTED IN THE WHERE CLAUSE	
QUERY ENTRIES	QUERY IDENTIFIER	U_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A USER DEFINED QUERY	
QUERY ENTRIES	QUERY ENTRY IDENTIFIER	QUERY_ID	String	VARCHAR 2(50)	NOT NULL	No	No	THE IDENTIFIER THAT REPRESENTS A SECTION OF THE QUERY	
QUERY ENTRIES	PARENT_ID	PARENT_I D	String	VARCHAR 2(50)	NULL	No	No		
QUERY ENTRIES	OPERATOR	OPERATO R	Number	NUMBER(2)	NOT NULL	No	No	THE OPERATOR IN THE WHERE CLAUSE OF THE QUERY	
QUERY ENTRIES	DATABASE FIELD	DB_FIELD	String	VARCHAR 2(150)	NULL	No	No	THE DATABASE FIELD IN THE WHERE CLAUSE OF THE QUERY	
QUERY ENTRIES		AK_ID	Number	NUMBER(12)	NULL	No	No		
QUERY ENTRIES		ARCHIVE_ DATE	Datetime	DATE	NULL	No	No		
QUERY ENTRIES		CLS_COD E	String	VARCHA R2(35)	NULL	No	No		
QUERY ENTRIES		CREATE_ DATE	Datetime	DATE	NULL	No	No		
QUERY ENTRIES		CURRENC Y_FLAG	String	CHAR(1)	NULL	No	No		
QUERY ENTRIES		MOD_DAT E	Datetime	DATE	NULL	No	No		

Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
QUERY ENTRIES		PARENT_VID	Number	NUMBER(12)	NULL	No	No		
QUERY ENTRIES		QUERY_VID	Number	NUMBER(12)	NOT NULL	No	No		
QUERY ENTRIES		SHADE_F_LAG	String	CHAR(1)	NULL	No	No		
QUERY ENTRIES		U_VID	Number	NUMBER(12)	NOT NULL	No	No		
RELATIONSHIP_ASN	RELATIONSHIP TYPE CODE	RLTN_TY_CD	String	VARCHAR2(35)	NULL	No	No	WHETHER OR NOT THE RELATIONSHIP BETWEEN THE ORGANIZATIONS IS PRIMARY OR CONTRIBUTING	
RELATIONSHIP_ASN	RELATIONSHIP ASSOCIATION DESCRIPTION TEXT	REL_ASN_DSC_TX	String	VARCHAR2(2000)	NULL	No	No	THE TEXT WHICH DESCRIBES THE RELATIONSHIP BETWEEN THE ORGANIZATIONS	
RELATIONSHIP_ASN	PARENT_TY	PARENT_TY	Number	NUMBER(5)	NULL	No	No		
RELATIONSHIP_ASN	PARENT ORGANIZATION	ORG_ID	String	VARCHAR2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE PARENT ORGANIZATION	
RELATIONSHIP_ASN	ORGANIZATION RELATIONSHIP ASSOCIATION IDENTIFIER	REL_ASN_ID	String	VARCHAR2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A RELATIONSHIP BETWEEN TWO ORGANIZATIONS	
RELATIONSHIP_ASN	CHILD_TY	CHILD_TY	Number	NUMBER(5)	NULL	No	No		
RELATIONSHIP_ASN	CHILD ORGANIZATION	ORG_ID	String	VARCHAR2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE CHILD ORGANIZATION	
RELATIONSHIP_ASN		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
RELATIONSHIP_ASN		ARCH_ID	String	VARCHAR2(50)	NULL	Yes	Yes		
RELATIONSHIP_ASN		ARCHIVE_DATE	Datetime	DATE	NULL	No	No		
RELATIONSHIP_ASN		CLS_CODE	String	VARCHAR2(35)	NOT NULL	No	No		
RELATIONSHIP_ASN		CREATE_DATE	Datetime	DATE	NOT NULL	No	No		
RELATIONSHIP_ASN		CURRENT_Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
RELATIONSHIP_ASN		MOD_DATE	Datetime	DATE	NOT NULL	No	No		
RELATIONSHIP_ASN		ORG_VID	Number	NUMBER(12)	NULL	No	Yes		
RELATIONSHIP_ASN		ORG_VID	Number	NUMBER(12)	NULL	No	Yes		
RELATIONSHIP_ASN		REL_ASN_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
RELATIONSHIP_ASN		SHADE_F_LAG	String	CHAR(1)	NOT NULL	No	No		
REPORT_FIELDS	REPORT_ID	REPORT_ID	String	VARCHAR2(50)	NULL	No	Yes		
REPORT_FIELDS	REPORT_FIELD_ID	REPORT_FIELD_ID	String	VARCHAR2(50)	NOT NULL	Yes	No		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
REPORT_FIELDS	FIELD_WIDTH_INCHES	FIELD_WIDTH_INCHES	Number	NUMBER(20,12)	NULL	No	No		
REPORT_FIELDS	FIELD_ORDER	FIELD_ORDER	Number	NUMBER	NULL	No	No		
REPORT_FIELDS	FIELD_ON_OWNER_LINE	FIELD_ON_OWNER_LINE	Number	NUMBER	NULL	No	No		
REPORT_FIELDS	FIELD_INTERNAL_NAME	FIELD_INTERNAL_NAME	String	VARCHAR2(200)	NULL	No	No		
REPORT_FIELDS	FIELD_HEADER_TEXT	FIELD_HEADER_TEXT	String	VARCHAR2(200)	NULL	No	No		
REPORT_FIELDS	FIELD_HEADER_FONT_UNDERLINE	FIELD_HEADER_FONT_UNDERLINE	Number	NUMBER	NULL	No	No		
REPORT_FIELDS	FIELD_HEADER_FONT_PT	FIELD_HEADER_FONT_PT	Number	NUMBER	NULL	No	No		
REPORT_FIELDS	FIELD_HEADER_FONT_ITALIC	FIELD_HEADER_FONT_ITALIC	Number	NUMBER	NULL	No	No		
REPORT_FIELDS	FIELD_HEADER_FONT_BOLD	FIELD_HEADER_FONT_BOLD	Number	NUMBER	NULL	No	No		
REPORT_FIELDS	FIELD_HEADER_FONT	FIELD_HEADER_FONT	String	VARCHAR2(50)	NULL	No	No		
REPORT_FIELDS	FIELD_FONT_UNDERLINE	FIELD_FONT_UNDERLINE	Number	NUMBER	NULL	No	No		
REPORT_FIELDS	FIELD_FONT_PT	FIELD_FONT_PT	Number	NUMBER	NULL	No	No		
REPORT_FIELDS	FIELD_FONT_ITALIC	FIELD_FONT_ITALIC	Number	NUMBER	NULL	No	No		
REPORT_FIELDS	FIELD_FONT_BOLD	FIELD_FONT_BOLD	Number	NUMBER	NULL	No	No		
REPORT_FIELDS	FIELD_FONT	FIELD_FONT	String	VARCHAR2(50)	NULL	No	No		
REPORT_FIELDS	AK_ID	AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
REPORT_FIELDS	ARCHIVE_DATE	ARCHIVE_DATE	Datetime	DATE	NULL	No	No		
REPORT_FIELDS	CLS_CODE	CLS_CODE	String	VARCHAR2(35)	NOT NULL	No	No		
REPORT_FIELDS	CREATE_DATE	CREATE_DATE	Datetime	DATE	NOT NULL	No	No		
REPORT_FIELDS	CURRENT_Y_FLAG	CURRENT_Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
REPORT_FIELDS	MOD_DATE	MOD_DATE	Datetime	DATE	NOT NULL	No	No		

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Entity Name	Attribute Name	Col. Nm. SHADE_F LAG	Dom. String	Datatype CHAR(1)	Null NOT NULL	PK No	FK No	Attribute Definition	Note
REPORTS	REPORT_USER_ID	REPORT_USER_ID	String	VARCHAR 2(20)	NULL	No	No		
REPORTS	REPORT_PRINT_POR TRAIT	REPORT_PRINT_POR TRAIT	Number	NUMBER(2)	NULL	No	No		
REPORTS	REPORT_OBJ_TYPE	REPORT_OBJ_TYPE	String	VARCHAR 2(50)	NULL	No	No		
REPORTS	REPORT_NAME	REPORT_NAME	String	VARCHAR 2(200)	NOT NULL	No	No		
REPORTS	REPORT_ID	REPORT_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No		
REPORTS	REPORT_DESC_TX	REPORT_DESC_TX	String	VARCHAR 2(2000)	NULL	No	No		
REPORTS		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
REPORTS		ARCHIVE_ DATE	Datetime	DATE	NULL	No	No		
REPORTS		CLS_CODE	String	VARCHAR 2(35)	NOT NULL	No	No		
REPORTS		CREATE_ DATE	Datetime	DATE	NOT NULL	No	No		
REPORTS		CURRENCY FLAG	String	CHAR(1)	NOT NULL	No	No		
REPORTS		MOD_DATE	Datetime	DATE	NOT NULL	No	No		
REPORTS		SHADE_F LAG	String	CHAR(1)	NOT NULL	No	No		
SHADE_TEMP	TABLE_NAME	TABLE_NAME	String	VARCHAR 2(50)	NOT NULL	No	No		
SHADE_TEMP	PK_ID_NAME	PK_ID_NAME	String	VARCHAR 2(50)	NOT NULL	No	No		
SHADE_TEMP	OBJ_ID	OBJ_ID	String	VARCHAR 2(50)	NOT NULL	No	No		
SHADE_TEMP	CURRENCY_FLAG	CURRENCY_FLAG	String	CHAR(1)	NOT NULL	No	No		
TEMP_TABLE	USERNAME	USERNAME	String	VARCHAR 2(50)	NOT NULL	No	No		
TEMP_TABLE	OLD_U_VID	OLD_U_VID	Number	NUMBER(12)	NOT NULL	No	No		
TEMP_TABLE	OLD_U_ID	OLD_U_ID	String	VARCHAR 2(50)	NOT NULL	No	No		
TEMP_TABLE	NEW_U_ID	NEW_U_ID	String	VARCHAR 2(50)	NOT NULL	No	No		
USER-PREFERENCE- ARCHITECTURE-SHARE- PERMISSION	USER-PREFERENCE- ARCHITECTURE- SHARE-PERMISSION IDENTIFIER	USER_AR _SHR_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A USER- PREFERENCE-ARCHITECTURE-SHARE-PERMISSION.	
USER-PREFERENCE- ARCHITECTURE-SHARE- PERMISSION	USER-PREFERENCE- ARCHITECTURE- SHARE-PERMISSION DESCRIPTION TEXT	USER_AR _SHR_DS C_TX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A USER-PREFERENCE- ARCHITECTURE-SHARE-PERMISSION.	

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Annex D (Table D-2, Implementation-Unique Entities)

UNCLASSIFIED

JCAPS 2.1 Attribute Specifications

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Entity Name	Attribute Name	Col. Nm. A_MASK	Dom. String	Datatype VARCHAR R2(255)	Null	PK	FK	Attribute Definition	Note
USER-PREFERENCE- ARCHITECTURE-SHARE- PERMISSION					NULL	No	No		
USER-PREFERENCE- ARCHITECTURE-SHARE- PERMISSION		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
USER-PREFERENCE- ARCHITECTURE-SHARE- PERMISSION		AR_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
USER-PREFERENCE- ARCHITECTURE-SHARE- PERMISSION		ARCH_ID	String	VARCHAR R2(50)	NOT NULL	Yes	Yes		
USER-PREFERENCE- ARCHITECTURE-SHARE- PERMISSION		ARCHIVE_ DATE	Datetim e	DATE	NULL	No	No		
USER-PREFERENCE- ARCHITECTURE-SHARE- PERMISSION		CLS_COD E	String	VARCHAR R2(35)	NOT NULL	No	No		
USER-PREFERENCE- ARCHITECTURE-SHARE- PERMISSION		CREATE_ DATE	Datetim e	DATE	NOT NULL	No	No		
USER-PREFERENCE- ARCHITECTURE-SHARE- PERMISSION		CURRENC Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
USER-PREFERENCE- ARCHITECTURE-SHARE- PERMISSION		MOD_DAT E	Datetim e	DATE	NOT NULL	No	No		
USER-PREFERENCE- ARCHITECTURE-SHARE- PERMISSION		SHADE_F LAG	String	CHAR(1)	NOT NULL	No	No		
USER-PREFERENCE- DOCUMENT-SHARE- PERMISSION	USER-PREFERENCE- DOCUMENT-SHARE- PERMISSION IDENTIFIER	USER_DO C_SHR_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A USER- PREFERENCE-DOCUMENT-SHARE-PERMISSION.	
USER-PREFERENCE- DOCUMENT-SHARE- PERMISSION	USER-PREFERENCE- DOCUMENT-SHARE- PERMISSION DESCRIPTION TEXT	USER_DO C_SHR_D SC_TX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A USER-PREFERENCE- DOCUMENT-SHARE-PERMISSION.	
USER-PREFERENCE- DOCUMENT-SHARE- PERMISSION		DOC_ID	String	VARCHAR 2(50)	NOT NULL	Yes	Yes		
USER-PREFERENCE- DOCUMENT-SHARE- PERMISSION		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
USER-PREFERENCE- DOCUMENT-SHARE- PERMISSION		ARCHIVE_ DATE	Datetim e	DATE	NULL	No	No		
USER-PREFERENCE- DOCUMENT-SHARE- PERMISSION		CLS_COD E	String	VARCHAR R2(35)	NOT NULL	No	No		
USER-PREFERENCE- DOCUMENT-SHARE- PERMISSION		CREATE_ DATE	Datetim e	DATE	NOT NULL	No	No		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
USER-PREFERENCE-DOCUMENT-SHARE-PERMISSION		CURRENT_Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
USER-PREFERENCE-DOCUMENT-SHARE-PERMISSION		D_MASK	String	VARCHAR2(255)	NULL	No	No		
USER-PREFERENCE-DOCUMENT-SHARE-PERMISSION		DOC_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
USER-PREFERENCE-DOCUMENT-SHARE-PERMISSION		MOD_DATE	Date	DATE	NOT NULL	No	No		
USER-PREFERENCE-DOCUMENT-SHARE-PERMISSION		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
VISUAL-REPRESENTATION-SYMBOL	YPOS	YPOS	Number	NUMBER(11,2)	NULL	No	No	THE Y COORDINATE OF THE SYMBOLIC REPRESENTATION ON A DIAGRAM	
VISUAL-REPRESENTATION-SYMBOL	XPOS	XPOS	Number	NUMBER(11,2)	NULL	No	No	THE X COORDINATE OF THE SYMBOLIC REPRESENTATION ON A DIAGRAM	
VISUAL-REPRESENTATION-SYMBOL	WIDTH	WIDTH	Number	NUMBER(11,2)	NULL	No	No	THE WIDTH OF THE SYMBOLIC REPRESENTATION ON A DIAGRAM	
VISUAL-REPRESENTATION-SYMBOL	VR_SYM_SYMBOL	VR_SYM_SYMBOL	<default >	BLOB(4000)	NULL	No	No		
VISUAL-REPRESENTATION-SYMBOL	VR_SYM_PICFLSYM_SW	VR_SYM_PICFLSYM_SW	String	CHAR(1)	NULL	No	No		
VISUAL-REPRESENTATION-SYMBOL	VR_SYM_PIC	VR_SYM_PIC	String	VARCHAR2(2000)	NULL	No	No		
VISUAL-REPRESENTATION-SYMBOL	VR_PIC_TYPE	VR_PIC_TYPE	String	VARCHAR2(20)	NULL	No	No		
VISUAL-REPRESENTATION-SYMBOL	VISUAL-REPRESENTATION-SYMBOL TYPE CODE	VRS_TY_CD	String	VARCHAR2(35)	NULL	No	No	THE CODE WHICH REPRESENTS THE TYPE OF VISUAL-REPRESENTATION-SYMBOL	
VISUAL-REPRESENTATION-SYMBOL	VISUAL-REPRESENTATION-SYMBOL TEXT ASCII PICTURE OR FILE OR SYMBOL SWITCH	VRS_SYM_PICFLSYM_SW	String	CHAR(1)	NULL	No	No	AN INDICATOR THAT VISUAL-REPRESENTATION-SYMBOL IS A PICTURE ENCODED IN ASCII TEXT, A FILE, OR A SYMBOL.	
VISUAL-REPRESENTATION-SYMBOL	VISUAL-REPRESENTATION-SYMBOL	VRS_SYM_SYMBOL	Blob	LONG RAW	NULL	No	No	A SYMBOLIC REPRESENTATION SAVED AS BINARY DATA.	
VISUAL-REPRESENTATION-SYMBOL	VISUAL-REPRESENTATION-SYMBOL OUTSIDE SYMBOL TEXT	VRS_TX_SYM_OT_D_TX	String	VARCHAR2(2000)	NULL	No	No	THE TEXT THAT IS PLACED OUTSIDE A VISUAL-REPRESENTATION-SYMBOL.	
VISUAL-REPRESENTATION-SYMBOL	VISUAL-REPRESENTATION-SYMBOL NAME	VISUAL_REPRESENTATION_SYMBOL_N	<default >	CHAR(10)	NULL	No	No	THE NAME OF A VISUAL-REPRESENTATION-SYMBOL.	
VISUAL-REPRESENTATION-SYMBOL	VISUAL-REPRESENTATION-SYMBOL INSIDE SYMBOL TEXT	VRS_TX_SYM_IT_DT_X	String	VARCHAR2(2000)	NULL	No	No	THE TEXT THAT IS PLACED INSIDE A VISUAL-REPRESENTATION-SYMBOL.	

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Annex D (Table D-2, Implementation-Unique Entities)

UNCLASSIFIED

JCAPS 2.1 Attribute Specifications

Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
VISUAL-REPRESENTATION-SYMBOL	VISUAL-REPRESENTATION-SYMBOL IDENTIFIER	VRS_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A VISUAL-REPRESENTATION-SYMBOL.	
VISUAL-REPRESENTATION-SYMBOL	VISUAL-REPRESENTATION-SYMBOL FILE PATH TEXT	VRS_FLT_TX	String	VARCHAR 2(80)	NULL	No	No	THE TEXT THAT DESCRIBES THE PATH TO ACCESS A VISUAL-REPRESENTATION-SYMBOL FILE.	
VISUAL-REPRESENTATION-SYMBOL	VISUAL-REPRESENTATION-SYMBOL FILE NAME	VRS_FLT_NM	String	VARCHAR 2(250)	NULL	No	No	THE NAME OF A FILE IN WHICH A VISUAL-REPRESENTATION-SYMBOL IS STORED.	
VISUAL-REPRESENTATION-SYMBOL	VISUAL-REPRESENTATION-SYMBOL DESCRIPTION TEXT	VRS_DTX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A VISUAL-REPRESENTATION-SYMBOL.	
VISUAL-REPRESENTATION-SYMBOL	TEMP_PENVR_CD	TEMP_PE_NVR_CD	String	VARCHAR 2(35)	NULL	No	No		
VISUAL-REPRESENTATION-SYMBOL	HEIGHT	HEIGHT	Number	NUMBER(11,2)	NULL	No	No	THE HEIGHT OF THE SYMBOLIC REPRESENTATION ON A DIAGRAM	
VISUAL-REPRESENTATION-SYMBOL		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
VISUAL-REPRESENTATION-SYMBOL		ARCHIVE_DATE	Datetime	DATE	NULL	No	No		
VISUAL-REPRESENTATION-SYMBOL		CLS_CODE	String	VARCHAR 2(35)	NOT NULL	No	No		
VISUAL-REPRESENTATION-SYMBOL		CREATE_DATE	Datetime	DATE	NOT NULL	No	No		
VISUAL-REPRESENTATION-SYMBOL		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
VISUAL-REPRESENTATION-SYMBOL		MOD_DATE	Datetime	DATE	NOT NULL	No	No		
VISUAL-REPRESENTATION-SYMBOL		SHADE_F_LAG	String	CHAR(1)	NOT NULL	No	No		
VISUAL-REPRESENTATION-SYMBOL		TEMP_PE_NVR_VID	Number	NUMBER(12)	NULL	No	No		
VISUAL-REPRESENTATION-SYMBOL		VRS_TY_V_ID	Number	NUMBER(12)	NULL	No	No		
VISUAL-REPRESENTATION-SYMBOL		VRS_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
WORKSPACE	WORKSPACE SPECIFIC INITIALIZATION FILE PATH TEXT	WS_SPEC_INIT_FL_PATH	String	VARCHAR 2(80)	NULL	No	No	THE TEXT THAT DESCRIBES THE LOCATION OF A FILE THAT CONTAINS WORKSPACE ENVIRONMENTAL PARAMETERS.	
WORKSPACE	WORKSPACE SPECIFIC INITIALIZATION FILE NAME	WS_SPEC_INIT_PLN_M	String	VARCHAR 2(250)	NULL	No	No	THE NAME OF A FILE THAT CONTAINS WORKSPACE ENVIRONMENTAL PARAMETERS.	
WORKSPACE	WORKSPACE NAME	WORKSPACE_NAME	String	VARCHAR 2(250)	NULL	No	No	THE NAME OF A WORKSPACE.	
WORKSPACE	WORKSPACE IDENTIFIER	WS_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A WORKSPACE.	
WORKSPACE	WORKSPACE DESCRIPTION TEXT	WS_DSC_TX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A WORKSPACE.	

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
WORKSPACE	SHARE CATEGORY CODE	SHARE_C AT_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE USED TO CATEGORIZE THE USERS' WORKSPACE FOR USE IN JCAPS DATA SHARING	
WORKSPACE		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
WORKSPACE		ARCHIVE_ DATE	Datetim e	DATE	NULL	No	No		
WORKSPACE		CLS_COD E	String	VARCHA R2(35)	NOT NULL	No	No		
WORKSPACE		CREATE_ DATE	Datetim e	DATE	NOT NULL	No	No		
WORKSPACE		CURRENC Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
WORKSPACE		MOD_DAT E	Datetim e	DATE	NOT NULL	No	No		
WORKSPACE		SHADE_F LAG	String	CHAR(1)	NOT NULL	No	No		
WORKSPACE		SHARE_C AT_VID	Number	NUMBER(12)	NULL	No	No		
WORKSPACE		WS_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
WORKSPACE-ARCHITECTURE	WORKSPACE- ARCHITECTURE IDENTIFIER	WS_AR_ID	String	VARCHA R2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A WORKSPACE- ARCHITECTURE.	
WORKSPACE-ARCHITECTURE	WORKSPACE- ARCHITECTURE DESCRIPTION TEXT	WS_AR_D SC_TX	String	VARCHA R2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A WORKSPACE- ARCHITECTURE RELATIONSHIP	
WORKSPACE-ARCHITECTURE	WORKSPACE IDENTIFIER	WS_ID	String	VARCHA R2(50)	NOT NULL	Yes	Yes	THE IDENTIFIER THAT REPRESENTS A JCAPS WORKSPACE	
WORKSPACE-ARCHITECTURE		A_MASK	String	VARCHA R2(255)	NULL	No	No		
WORKSPACE-ARCHITECTURE		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
WORKSPACE-ARCHITECTURE		AR_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
WORKSPACE-ARCHITECTURE		ARCH_ID	String	VARCHA R2(50)	NOT NULL	Yes	Yes		
WORKSPACE-ARCHITECTURE		ARCHIVE_ DATE	Datetim e	DATE	NULL	No	No		
WORKSPACE-ARCHITECTURE		CLS_COD E	String	VARCHA R2(35)	NOT NULL	No	No		
WORKSPACE-ARCHITECTURE		CREATE_ DATE	Datetim e	DATE	NOT NULL	No	No		
WORKSPACE-ARCHITECTURE		CURRENC Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
WORKSPACE-ARCHITECTURE		MOD_DAT E	Datetim e	DATE	NOT NULL	No	No		
WORKSPACE-ARCHITECTURE		SHADE_F LAG	String	CHAR(1)	NOT NULL	No	No		
WORKSPACE-ARCHITECTURE		WS_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
WORKSPACE-DOCUMENT	WORKSPACE- DOCUMENT IDENTIFIER	WS_DOC_ ID	String	VARCHA R2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A WORKSPACE- DOCUMENT.	

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Annex D (Table D-2, Implementation-Unique Entities)

UNCLASSIFIED

JCAPS 2.1 Attribute Specifications

Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
WORKSPACE-DOCUMENT	WORKSPACE-DOCUMENT DESCRIPTION TEXT	WS_DOC_DSC_TX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A WORKSPACE-DOCUMENT RELATIONSHIP	
WORKSPACE-DOCUMENT	WORKSPACE IDENTIFIER	WS_ID	String	VARCHAR 2(50)	NOT NULL	Yes	Yes	THE IDENTIFIER THAT REPRESENTS A JCAPS WORKSPACE	
WORKSPACE-DOCUMENT	DOCUMENT IDENTIFIER	DOC_ID	String	VARCHAR 2(50)	NOT NULL	Yes	Yes	THE IDENTIFIER THAT REPRESENTS A DOCUMENT	
WORKSPACE-DOCUMENT		AK_ID	Number	NUMBER(12)	NOT NULL	No	No	(AFV2 PRODUCT)	
WORKSPACE-DOCUMENT		ARCHIVE_DATE	Date	DATE	NULL	No	No		
WORKSPACE-DOCUMENT		CLS_CODE	String	VARCHAR 2(35)	NOT NULL	No	No		
WORKSPACE-DOCUMENT		CREATE_DATE	Date	DATE	NULL	No	No		
WORKSPACE-DOCUMENT		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
WORKSPACE-DOCUMENT		D_MASK	String	VARCHAR 2(255)	NULL	No	No		
WORKSPACE-DOCUMENT		DOC_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
WORKSPACE-DOCUMENT		MOD_DATE	Date	DATE	NOT NULL	No	No		
WORKSPACE-DOCUMENT		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
WORKSPACE-DOCUMENT		WS_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
WORLD_Q	TABLE_NAME	TABLE_NAME	String	VARCHAR 2(50)	NOT NULL	No	No		
WORLD_Q	OBJ_AK_ID	OBJ_AK_ID	String	VARCHAR 2(50)	NOT NULL	No	No		
WORLD_Q	MOD_DATE	MOD_DATE	Date	DATE	NOT NULL	No	No		
WORLD_Q	COLUMN_NAME	COLUMN_NAME	String	VARCHAR 2(50)	NOT NULL	No	No		

Table D-3. Attribute Specifications for Entities Not Yet Available to Users

Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
CIRCUIT-IER ASSOCIATION	CIRCUIT-IER ASSOCIATION IDENTIFIER	CIRCUIT_IER_RLASN_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A CIRCUIT-IER RELATIONSHIP	
CIRCUIT-IER ASSOCIATION	COMMUNICATION CIRCUIT IDENTIFIER	COM_CRC_T_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION CIRCUIT	
CIRCUIT-IER ASSOCIATION	INFORMATION EXCHANGE REQUIREMENT IDENTIFIER	IER_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS AN IER	
CIRCUIT-IER ASSOCIATION		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
CIRCUIT-IER ASSOCIATION		ARCH_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No		
CIRCUIT-IER ASSOCIATION		ARCHIVE_DATE	Date	DATE	NOT NULL	No	No		
CIRCUIT-IER ASSOCIATION		CLS_CODE	String	VARCHAR 2(35)	NOT NULL	No	No		
CIRCUIT-IER ASSOCIATION		COM_CRC_T_ID	Number	NUMBER(12)	NOT NULL	Yes	No		
CIRCUIT-IER ASSOCIATION		CREATE_DATE	Date	DATE	NOT NULL	No	No		
CIRCUIT-IER ASSOCIATION		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
CIRCUIT-IER ASSOCIATION		IER_ID	Number	NUMBER(12)	NOT NULL	Yes	No		
CIRCUIT-IER ASSOCIATION		MOD_DATE	Date	DATE	NOT NULL	No	No		
CIRCUIT-IER ASSOCIATION		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
COMMUNICATION-MEDIUM	COMMUNICATION-MEDIUM ABBREVIATED NAME	COM_MED_ABBR_NM	String	VARCHAR 2(250)	NOT NULL	No	No	A SHORTENED FORM OF THE NAME OF A COMMUNICATION-MEDIUM.	
COMMUNICATION-MEDIUM	COMMUNICATION-MEDIUM IDENTIFIER	COM_MED_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION-MEDIUM.	
COMMUNICATION-MEDIUM	COMMUNICATION-MEDIUM NAME	COM_MED_NM	String	VARCHAR 2(250)	NOT NULL	No	No	THE NAME OF A COMMUNICATION-MEDIUM.	
COMMUNICATION-MEDIUM		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
COMMUNICATION-MEDIUM		ARCH_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No		
COMMUNICATION-MEDIUM		ARCHIVE_DATE	Date	DATE	NOT NULL	No	No		
COMMUNICATION-MEDIUM		CLS_CODE	String	VARCHAR 2(35)	NOT NULL	No	No		
COMMUNICATION-MEDIUM		COM_MED_ID	Number	NUMBER(12)	NOT NULL	Yes	No		
COMMUNICATION-MEDIUM		CREATE_DATE	Date	DATE	NOT NULL	No	No		
COMMUNICATION-MEDIUM		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		

Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
COMMUNICATION-MEDIUM		MOD_DAT_E	Dateime	DATE	NOT NULL	No	No		
COMMUNICATION-MEDIUM		SHADE_FL_AG	String	CHAR(1)	NOT NULL	No	No		
DATA-ITEM	DATA ITEM IDENTIFIER	MI_ID	String	VARCHAR2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A DATA ITEM	
DATA-ITEM	DATA-ITEM-TYPE CODE	DT_IT_TY_CD	String	VARCHAR2(35)	NULL	No	Yes	THE CODE THAT DENOTES A KIND OF DATA-ITEM.	AC (ACINT); AIR (Air Situation); ASI (All Source Intelligence); ATC (Air Traffic Control); BAT (Battlefield Situation/Info/Picture); BSC (Battlespace Coordination); BSM (Battlespace Management); C2 (Command and Control); CBT (Combat Direction); COL (Collection Request/Tasking); CUE (Cueing); EW (Early Warning); FC (Fire Control); FD (Fire Direction); FMA (Fire Mission Adjustment); FSC (Fire Support Coordination); HUM (HUMINT); ID (Object Identification); IM (IMINT); IME (Electro-Optical Imagery; IMI (Infrared Imagery); IMR (Raw Imagery); IMS (SAR Imagery); IMV (Video Imagery); MAS (MASINT); MSI; MSR (Mission Report); PHT (PHOTINT); PLT (Platform Status); RFF (Request/call for fire); RFI (Request for Intelligence); RIM (Radar Imagery); RIT (RADINT); SED (Sensor Data); SEN (Sensor Management); SG (SIGINT); SGR (Raw SIGINT); SUR (Surveillance); TGT (Target); THR (Threat Warning); TRK (Track); TSK (Tasking); VID (Video); WPC (Weapon Coordination); WPN (Weapon Direction/Management); WPS (Weapon/Mission Status); Other
DATA-ITEM		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
DATA-ITEM		ARCH_ID	String	VARCHAR2(50)	NOT NULL	Yes	Yes		
DATA-ITEM		ARCHIVE_DATE	Dateime	DATE	NULL	No	No		
DATA-ITEM		CLS_CODE	String	VARCHAR2(35)	NOT NULL	No	No		
DATA-ITEM		CREATE_DATE	Dateime	DATE	NOT NULL	No	No		
DATA-ITEM		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
DATA-ITEM		DT_IT_TY_VID	Number	NUMBER(12)	NULL	No	Yes		
DATA-ITEM		MI_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
DATA-ITEM		MOD_DAT_E	Dateime	DATE	NOT NULL	No	No		
DATA-ITEM		SHADE_FL_AG	String	CHAR(1)	NOT NULL	No	No		
DATA-ITEM-TYPE	DATA-ITEM-TYPE CLASS CODE	DT_IT_TY_CD	String	VARCHAR2(35)	NULL	No	No	THE CODE THAT DENOTES A SPECIFIC GROUPING OF A DATA-ITEM-TYPE.	Digital ASCII data; Digital bit-oriented data; I--Image; T--Text ASCII; VD--Video; V--Voice; Other; Not specified; Not known. [Derived from HDD for the Naval Architecture Database]

Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
DATA-ITEM-TYPE	DATA-ITEM-TYPE CODE	DT_IT_TY_CD	String	VARCHAR 2(35)	NOT NULL	Yes	No	THE CODE THAT DENOTES A KIND OF DATA- ITEM.	AC (ACINT); AIR (Air Situation); ASI (All Source Intelligence); ATC (Air Traffic Control); BAT (Battlefield Situation/Info/Picture); BSC (Battlespace Coordination); BSM (Battlespace Management); C2 (Command and Control); CBT (Combat Direction); COL (Collection Request/Tasking); CUE (Cueing); EW (Early Warning); FC (Fire Control); FD (Fire Direction); FMA (Fire Mission Adjustment); FSC (Fire Support Coordination); HUM (HUMINT); ID (Object Identification); IM (IMINT); IME (Electro-Optical Imagery; IMI (Infrared Imagery); IMR (Raw Imagery); IMS (SAR Imagery); INV (Video Imagery); MAS (MASINT); MSI; MSR (Mission Report); PHT (PHOTINT); PLT (Platform Status); RFE (Request/call for fire); RFI (Request for intelligence); RIM (Radar Imagery); RIT (RADINT); SED (Sensor Data); SEN (Sensor Management); SG (SIGINT); SGR (Raw SIGINT); SUR (Surveillance); TGT (Target); THR (Threat Warning); TRK (Track); TSK (Tasking); VID (Video); WPC (Weapon Coordination); WPN (Weapon Direction/Management); WPS (Weapon/Mission Status); Other
DATA-ITEM-TYPE		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
DATA-ITEM-TYPE		ARCH_ID	String	VARCHAR R2(50)	NOT NULL	Yes	No		
DATA-ITEM-TYPE		ARCHIVE_DATE	Date	DATE	NOT NULL	No	No		
DATA-ITEM-TYPE		CLS_CODE	String	VARCHAR R2(35)	NOT NULL	No	No		
DATA-ITEM-TYPE		CREATE_DATE	Date	DATE	NOT NULL	No	No		
DATA-ITEM-TYPE		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
DATA-ITEM-TYPE		DT_IT_TY_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
DATA-ITEM-TYPE		MOD_DATE	Date	DATE	NOT NULL	No	No		
DATA-ITEM-TYPE		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
DOCUMENT-IER ASSOCIATION	DOCUMENT IDENTIFIER	DOC_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A DOCUMENT (PRODUCT)	
DOCUMENT-IER ASSOCIATION	INFORMATION EXCHANGE REQUIREMENT IDENTIFIER	IER_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS AN INFORMATION EXCHANGE REQUIREMENT	
DOCUMENT-IER ASSOCIATION		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
DOCUMENT-IER ASSOCIATION		ARCHIVE_DATE	Date	DATE	NOT NULL	No	No		
DOCUMENT-IER ASSOCIATION		CLS_CODE	String	VARCHAR R2(35)	NOT NULL	No	No		
DOCUMENT-IER ASSOCIATION		CREATE_DATE	Date	DATE	NOT NULL	No	No		
DOCUMENT-IER ASSOCIATION		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
DOCUMENT-IER ASSOCIATION		DOC_VID	Number	NUMBER(12)	NOT NULL	Yes	No		

Entity Name	Attribute Name	Col. Nm. IER_VID	Dom. Numb er	Datatype NUMBER(12) DATE CHAR(1) VARCHAR 2(35) VARCHAR 2(35) VARCHAR 2(2000) VARCHAR 2(35) VARCHAR 2(35) VARCHAR 2(2000) VARCHAR 2(35) VARCHAR 2(50) VARCHAR 2(35) VARCHAR 2(35) VARCHAR 2(50) VARCHAR 2(35) VARCHAR 2(35) VARCHAR 2(50) VARCHAR 2(50) VARCHAR 2(50)	Null	PK	FK	Attribute Definition	Note
DOCUMENT-IER ASSOCIATION		MOD_DAT E	String	DATE	NOT NULL	No	No		
DOCUMENT-IER ASSOCIATION		SHADE_FL AG	String	CHAR(1)	NOT NULL	No	No		
EXCHANGE-NEED- LINE-REQUIREMENT	EXCHANGE-NEED- LINE-REQUIREMENT AUTOMATION PRIORITY CODE	ENLR_AUT OM_PRTY_ CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT REPRESENTS HOW OPERATIONALLY IMPORTANT IT IS FOR A SPECIFIC EXCHANGE-NEED- LINE-REQUIREMENT TO BE PARSED AND PROCESSED AUTOMATICALLY.	H--High; M--Medium; L--Low, where low may mean unimportant, infeasible, or currently automated. [HDD for Naval Architecture Database]
EXCHANGE-NEED- LINE-REQUIREMENT	EXCHANGE-NEED- LINE-REQUIREMENT AVAILABILITY INDICATOR CODE	ENLR_AVA L_IND_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT REPRESENTS THE ASSESSMENT OF THE CURRENT CAPABILITY TO OBTAIN A PHYSICAL LINK FOR A SPECIFIC EXCHANGE- NEED-LINE-REQUIREMENT.	A--Available; SA--Sometimes Available; N--Never Available. [HDD for Naval Architecture Database]
EXCHANGE-NEED- LINE-REQUIREMENT	EXCHANGE-NEED- LINE-REQUIREMENT CONSTRAINT TEXT	ENLR_CNS TR_TX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES LIMITATIONS ON THE USE OF AN EXCHANGE-NEED-LINE-REQUIREMENT.	
EXCHANGE-NEED- LINE-REQUIREMENT	EXCHANGE-NEED- LINE-REQUIREMENT CRITICALITY CODE	ENLR_CRIT _CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT REPRESENTS AN EVALUATION OF THE MISSION ESSENTIALITY OF A SPECIFIC EXCHANGE-NEED-LINE- REQUIREMENT.	H--High; M--Medium; L--Low. [HDD for Naval Architecture Database]
EXCHANGE-NEED- LINE-REQUIREMENT	EXCHANGE-NEED- LINE-REQUIREMENT DESCRIPTION TEXT	EXGN_NDL N_REQ_DT X	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES AN EXCHANGE-NEED-LINE- REQUIREMENT.	
EXCHANGE-NEED- LINE-REQUIREMENT	EXCHANGE-NEED- LINE-REQUIREMENT FREQUENCY CONTINUITY TYPE CODE	ENLR_FCN TY_TV_CD	String	VARCHAR 2(35)	NULL	No	No	THE TIME DISTRIBUTION OF OCCURRENCE OF USE OF AN EXCHANGE-NEED-LINE- REQUIREMENT.	C--Continuous; P--Periodic; AO--As Occurring (AO). [HDD for Naval Architecture Database]
EXCHANGE-NEED- LINE-REQUIREMENT	EXCHANGE-NEED- LINE-REQUIREMENT IDENTIFIER	EXGN_ND_ LN_REQ_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS AN EXCHANGE-NEED- LINE-REQUIREMENT.	
EXCHANGE-NEED- LINE-REQUIREMENT	EXCHANGE-NEED- LINE-REQUIREMENT SECURITY LEVEL CODE	ENLR_SEC _LVL_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT SPECIFIES THE DEGREE OF PROTECTION FOR AN EXCHANGE-NEED-LINE- REQUIREMENT.	SCI, TS, S, C, FOUO, TS/SCI
EXCHANGE-NEED- LINE-REQUIREMENT	EXCHANGE-NEED- LINE-REQUIREMENT TIMELINESS CODE	ENLR_TML Y_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT CHARACTERIZES HOW QUICKLY INFORMATION SHOULD BE TRANSMITTED USING AN EXCHANGE-NEED-LINE- REQUIREMENT.	RT--Real Time; NRT--Near-Real- Time (< 1 sec); M--Moderate (1-10 sec); S--Slow (10 s - 10 m); VS-- Very Slow (>10 min). [HDD for Naval Architecture Database]
EXCHANGE-NEED- LINE-REQUIREMENT	RECEIVING COMMAND- CONTROL-ELEMENT IDENTIFIER	C2E_ID	String	VARCHAR 2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE RECEIVING COMMAND AND CONTROL ELEMENT	
EXCHANGE-NEED- LINE-REQUIREMENT	RECEIVING ORGANIZATION IDENTIFIER	ORG_ID	String	VARCHAR 2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE RECEIVING ORGANIZATION	
EXCHANGE-NEED- LINE-REQUIREMENT	SENDING COMMAND- CONTROL-ELEMENT IDENTIFIER	C2E_ID	String	VARCHAR 2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE SENDING COMMAND AND CONTROL ELEMENT	

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
EXCHANGE-NEED-LINE-REQUIREMENT	SENDING ORGANIZATION IDENTIFIER	ORG_ID	String	VARCHAR 2(50)	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS THE SENDING ORGANIZATION	
EXCHANGE-NEED-LINE-REQUIREMENT		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
EXCHANGE-NEED-LINE-REQUIREMENT		ARCH_ID	String	VARCHAR 2(50)	NOT NULL	Yes	Yes		
EXCHANGE-NEED-LINE-REQUIREMENT		ARCHIVE_DATE	Date	DATE	NULL	No	No		
EXCHANGE-NEED-LINE-REQUIREMENT		CSE_VID	Number	NUMBER	NULL	No	Yes		
EXCHANGE-NEED-LINE-REQUIREMENT		CLS_CODE	String	VARCHAR 2(35)	NOT NULL	No	No		
EXCHANGE-NEED-LINE-REQUIREMENT		CREATE_DATE	Date	DATE	NOT NULL	No	No		
EXCHANGE-NEED-LINE-REQUIREMENT		CURRENT_Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
EXCHANGE-NEED-LINE-REQUIREMENT		EXCN_ND_LN_REQ_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
EXCHANGE-NEED-LINE-REQUIREMENT		MOD_DATE	Date	DATE	NOT NULL	No	No		
EXCHANGE-NEED-LINE-REQUIREMENT		ORG_VID	Number	NUMBER(12)	NULL	No	Yes		
EXCHANGE-NEED-LINE-REQUIREMENT		ORG_VID	Number	NUMBER(12)	NULL	No	Yes		
EXCHANGE-NEED-LINE-REQUIREMENT		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
EXCHANGE-NEED-LINE-REQUIREMENT	FUNCTION DESCRIPTION TEXT	FUNC_D_TXT	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A FUNCTION.	
FUNCTION	FUNCTION IDENTIFIER	FUNC_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A FUNCTION.	
FUNCTION	FUNCTION NAME	FUNC_NM	String	VARCHAR 2(250)	NULL	No	No	THE NAME OF A FUNCTION.	
FUNCTION	FUNCTION TYPE CODE	FUNC_TY_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT DENOTES A KIND OF FUNCTION.	
FUNCTION	FUNCTION VERSION IDENTIFIER	FUNC_VID	Number	NUMBER(12)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A SPECIFIC VERSION OF A FUNCTION.	
FUNCTION	FUNCTIONAL-AREA IDENTIFIER	FNCT_ARE_A_ID	String	VARCHAR 2(50)	NULL	No	Yes	(20492) (A) THE IDENTIFIER THAT REPRESENTS A FUNCTIONAL-AREA.	
FUNCTION		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
FUNCTION		ARCH_ID	String	VARCHAR 2(50)	NOT NULL	Yes	Yes		
FUNCTION		ARCH_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No		
FUNCTION		ARCHIVE_DATE	Date	DATE	NULL	No	No		
FUNCTION		CLS_CODE	String	VARCHAR 2(35)	NOT NULL	No	No		
FUNCTION		CREATE_DATE	Date	DATE	NOT NULL	No	No		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
FUNCTION		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
FUNCTION		FUNCTIONAL_AREA_VID	Number	NUMBER(12)	NULL	No	Yes		
FUNCTION		MOD_DATE	Date	DATE	NOT NULL	No	No		
FUNCTION		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
FUNCTIONAL-AREA	FUNCTIONAL_AREA_DTX	FUNCTIONAL_AREA_DTX	String	VARCHAR(2(2000))	NULL	No	No		
FUNCTIONAL-AREA	FUNCTIONAL-AREA DESCRIPTION TEXT	FUNCTIONAL_AREA_DESCRIPTION_TX	String	VARCHAR(2(2000))	NULL	No	No	THE TEXT THAT DESCRIBES A FUNCTIONAL-AREA.	
FUNCTIONAL-AREA	FUNCTIONAL-AREA IDENTIFIER	FUNCTIONAL_AREA_ID	String	VARCHAR(2(50))	NOT NULL	Yes	No	(20492) (A) THE IDENTIFIER THAT REPRESENTS A FUNCTIONAL-AREA.	
FUNCTIONAL-AREA	FUNCTIONAL-AREA MISSION TEXT	FUNCTIONAL_AREA_MSN_TX	String	VARCHAR(2(2000))	NULL	No	No	(20226) (A) THE TEXT OF THE PURPOSE AND OBJECTIVES OF A FUNCTIONAL-AREA.	
FUNCTIONAL-AREA	FUNCTIONAL-AREA NAME	FUNCTIONAL_AREA_NM	String	VARCHAR(2(250))	NULL	No	No	(20225) (A) THE NAME OF A FUNCTIONAL-AREA.	
FUNCTIONAL-AREA	FUNCTIONAL-AREA STEWARD NAME	FUNCTIONAL_AREA_STWD_NM	String	VARCHAR(2(250))	NULL	No	No	(26755) (A) THE NAME OF THE MANAGER OF A FUNCTIONAL-AREA.	
FUNCTIONAL-AREA	FUNCTIONAL-AREA TYPE CODE	FUNCTIONAL_AREA_TYP_CD	String	VARCHAR(2(35))	NULL	No	No	THE CODE THAT REPRESENTS A KIND OF FUNCTIONAL-AREA.	
FUNCTIONAL-AREA	ORGANIZATION IDENTIFIER	ORG_ID	String	VARCHAR(2(50))	NULL	No	Yes	(7875) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	
FUNCTIONAL-AREA		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
FUNCTIONAL-AREA		ARCH_ID	String	VARCHAR(2(50))	NOT NULL	Yes	Yes		
FUNCTIONAL-AREA		ARCHIVE_DATE	Date	DATE	NULL	No	No		
FUNCTIONAL-AREA		CLS_CODE	String	VARCHAR(2(35))	NOT NULL	No	No		
FUNCTIONAL-AREA		CREATE_DATE	Date	DATE	NOT NULL	No	No		
FUNCTIONAL-AREA		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
FUNCTIONAL-AREA		FUNCTIONAL_AREA_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
FUNCTIONAL-AREA		MOD_DATE	Date	DATE	NOT NULL	No	No		
FUNCTIONAL-AREA		ORG_VID	Number	NUMBER(12)	NULL	No	Yes		
FUNCTIONAL-AREA		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
INTERFACE-IER ASSOCIATION	IER IDENTIFIER	IER_ID	String	VARCHAR(2(50))	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS AN INFORMATION EXCHANGE REQUIREMENT	
INTERFACE-IER ASSOCIATION	INTERFACE IDENTIFIER	INTF_ID	String	VARCHAR(2(50))	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS AN INTERFACE	
INTERFACE-IER ASSOCIATION	INTERFACE IER ASSOCIATION IDENTIFIER	INTF_IER_ASN_ID	String	VARCHAR(2(50))	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS AN INFORMATION EXCHANGE REQUIREMENT - INTERFACE RELATIONSHIP	

Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
INTERFACE-IER ASSOCIATION		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
INTERFACE-IER ASSOCIATION		ARCH_ID	String	VARCHAR2(50)	NOT NULL	Yes	No		
INTERFACE-IER ASSOCIATION		ARCHIVE_DATE	Date	DATE	NOT NULL	No	No		
INTERFACE-IER ASSOCIATION		CLS_CODE	String	VARCHAR2(35)	NOT NULL	No	No		
INTERFACE-IER ASSOCIATION		CREATE_DATE	Date	DATE	NOT NULL	No	No		
INTERFACE-IER ASSOCIATION		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
INTERFACE-IER ASSOCIATION		IER_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
INTERFACE-IER ASSOCIATION		INTF_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
INTERFACE-IER ASSOCIATION		MOD_DATE	Date	DATE	NOT NULL	No	No		
INTERFACE-IER ASSOCIATION		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
INTERFACE-IER ASSOCIATION	COMMUNICATION LINK IDENTIFIER	COM_LNK_ID	String	VARCHAR2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION LINK	
INTERFACE-IER ASSOCIATION	IER IDENTIFIER	IER_ID	String	VARCHAR2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS AN INFORMATION EXCHANGE REQUIREMENT	
INTERFACE-IER ASSOCIATION	LINK IER ASSOCIATION IDENTIFIER	LINK_IER_ASN_ID	String	VARCHAR2(50)	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS THE RELATIONSHIP BETWEEN A COMMUNICATION LINK AND AN INFORMATION EXCHANGE REQUIREMENT	
LINK-IER ASSOCIATION		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
LINK-IER ASSOCIATION		ARCH_ID	String	VARCHAR2(50)	NOT NULL	Yes	No		
LINK-IER ASSOCIATION		ARCHIVE_DATE	Date	DATE	NOT NULL	No	No		
LINK-IER ASSOCIATION		CLS_CODE	String	VARCHAR2(35)	NOT NULL	No	No		
LINK-IER ASSOCIATION		COM_LNK_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
LINK-IER ASSOCIATION		CREATE_DATE	Date	DATE	NOT NULL	No	No		
LINK-IER ASSOCIATION		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
LINK-IER ASSOCIATION		IER_VID	Number	NUMBER(12)	NOT NULL	Yes	No		
LINK-IER ASSOCIATION		MOD_DATE	Date	DATE	NOT NULL	No	No		
LINK-IER ASSOCIATION		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
MISSION-AREA	MISSION-AREA DESCRIPTION TEXT	MSN_AR_DSCRPTN_TX	String	VARCHAR2(2000)	NOT NULL	No	No	(16076) (A) THE TEXT THAT DESCRIBES A MISSION-AREA.	
MISSION-AREA	MISSION-AREA NAME	MSN_AR_NM	String	VARCHAR2(250)	NOT NULL	No	No	(16077) (A) THE NAME OF A MISSION-AREA.	

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
MISSION-AREA	MISSION-AREA TYPE CODE	MSN_AR_T YP_CD	String	VARCHAR 2(35)	NOT NULL	Yes	No	(16078) (A) THE CODE THAT DENOTES A CLASS OF MISSION-AREA.	
MISSION-AREA		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
MISSION-AREA		ARCH_ID	String	VARCHAR R2(50)	NOT NULL	Yes	No		
MISSION-AREA		ARCHIVE_ DATE	Date	DATE	NULL	No	No		
MISSION-AREA		CLS_CODE	String	VARCHAR R2(35)	NOT NULL	No	No		
MISSION-AREA		CREATE_ DATE	Date	DATE	NOT NULL	No	No		
MISSION-AREA		CURRENT_ Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
MISSION-AREA		MOD_DAT E	Date	DATE	NOT NULL	No	No		
MISSION-AREA		MSN_AR_V ID	Number	NUMBER(12)	NOT NULL	Yes	No		
MISSION-AREA		SHADE_FL AG	String	CHAR(1)	NOT NULL	No	No		
MISSION-AREA- FUNCTIONAL-AREA	FUNCTIONAL-AREA IDENTIFIER	FNCT_ARE A_ID	String	VARCHAR 2(50)	NOT NULL	Yes	Yes	(20492) (A) THE IDENTIFIER THAT REPRESENTS A FUNCTIONAL-AREA.	
MISSION-AREA- FUNCTIONAL-AREA	MISSION-AREA TYPE CODE	MSN_AR_T YP_CD	String	VARCHAR 2(35)	NOT NULL	Yes	Yes	(16078) (A) THE CODE THAT DENOTES A CLASS OF MISSION-AREA.	
MISSION-AREA- FUNCTIONAL-AREA	MISSION-AREA- FUNCTIONAL-AREA DESCRIPTION TEXT	MS_AR_F_ AR_DTX	String	VARCHAR 2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A MISSION-AREA-FUNCTIONAL-AREA.	
MISSION-AREA- FUNCTIONAL-AREA	MISSION-AREA- FUNCTIONAL-AREA ROLE CODE	MS_AR_F_ AR_RL_CD	String	VARCHAR 2(35)	NULL	No	No	THE CODE THAT DESIGNATES THE SPECIFIC WAY IN WHICH A FUNCTIONAL-AREA IS CITED FOR AN INSTANCE OF MISSION-AREA.	is supported by; References
MISSION-AREA- FUNCTIONAL-AREA		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
MISSION-AREA- FUNCTIONAL-AREA		ARCH_ID	String	VARCHAR R2(50)	NOT NULL	Yes	Yes		
MISSION-AREA- FUNCTIONAL-AREA		ARCHIVE_ DATE	Date	DATE	NULL	No	No		
MISSION-AREA- FUNCTIONAL-AREA		CLS_CODE	String	VARCHAR R2(35)	NOT NULL	No	No		
MISSION-AREA- FUNCTIONAL-AREA		CREATE_ DATE	Date	DATE	NOT NULL	No	No		
MISSION-AREA- FUNCTIONAL-AREA		CURRENT_ Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
MISSION-AREA- FUNCTIONAL-AREA		FNCT_ARE A_ID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
MISSION-AREA- FUNCTIONAL-AREA		MOD_DAT E	Date	DATE	NOT NULL	No	No		
MISSION-AREA- FUNCTIONAL-AREA		MSN_AR_V ID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
MISSION-AREA- FUNCTIONAL-AREA		SHADE_FL AG	String	CHAR(1)	NOT NULL	No	No		
MISSION-AREA- FUNCTIONAL-AREA	DEST_SYS_ID	SYS_ID_2	String	VARCHAR 2(50)	NULL	No	Yes		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
SYSTEM IEM	INP_DATA_CONT_ID	ML_ID	String	VARCHAR 2(50)	NULL	No	Yes		
SYSTEM IEM	INP_FORMAT_CD	DT_IT_TY_CD	String	VARCHAR 2(35)	NULL	No	Yes		
SYSTEM IEM	INP_MED_FMT_ID	INP_MED_FMT_ID	String	VARCHAR 2(50)	NULL	No	No		
SYSTEM IEM	INP_MEDIA_ID	COM_MED_ID	String	VARCHAR 2(50)	NULL	No	Yes		
SYSTEM IEM	INP_MSG_CONT_ID	MESSAGE_ID	String	VARCHAR 2(50)	NULL	No	Yes		
SYSTEM IEM	INTERFACE IDENTIFIER	INTF_ID	String	VARCHAR 2(50)	NULL	No	Yes		
SYSTEM IEM	OUT_DATA_ML_ID	ML_ID	String	VARCHAR 2(50)	NULL	No	Yes		
SYSTEM IEM	OUT_FORMAT_CD	DT_IT_TY_CD	String	VARCHAR 2(35)	NULL	No	Yes		
SYSTEM IEM	OUT_MED_FMT_ID	OUT_MED_FMT_ID	String	VARCHAR 2(50)	NULL	No	No		
SYSTEM IEM	OUT_MEDIA_ID	COM_MED_ID	String	VARCHAR 2(50)	NULL	No	Yes		
SYSTEM IEM	OUT_MSG_CONT_ID	MESSAGE_ID	String	VARCHAR 2(50)	NULL	No	Yes		
SYSTEM IEM	SOURCE_SYS_ID	SYS_ID_1	String	VARCHAR 2(50)	NULL	No	Yes		
SYSTEM IEM	SYS_FUNC_ID	FUNC_ID	String	VARCHAR 2(50)	NULL	No	Yes		
SYSTEM IEM	SYS_FUNC_VID	FUNC_VID	Number 12	NUMBER(12)	NULL	No	Yes		
SYSTEM IEM	SYS_IEM_D_TXT	SYS_IEM_D_TXT	String	VARCHAR 2(2000)	NULL	No	No		
SYSTEM IEM	SYS_IEM_ID	SYS_IEM_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No		
SYSTEM IEM	SYS_IEM_NM	SYS_IEM_NM	String	VARCHAR 2(250)	NULL	No	No		
SYSTEM IEM		AK_ID	Number 12	NUMBER(12)	NOT NULL	No	No		
SYSTEM IEM		ARCH_ID	String	VARCHA R2(50)	NULL	Yes	Yes		
SYSTEM IEM		ARCHIVE_DATE	Date time	DATE	NULL	No	No		
SYSTEM IEM		CLS_CODE	String	VARCHA R2(35)	NOT NULL	No	No		
SYSTEM IEM		COM_MED_VID	Number 12	NUMBER(12)	NULL	No	Yes		
SYSTEM IEM		COM_MED_VID	Number 12	NUMBER(12)	NULL	No	Yes		
SYSTEM IEM		CREATE_DATE	Date time	DATE	NOT NULL	No	No		
SYSTEM IEM		CURRENCY_FLAG	String	CHAR(1)	NOT NULL	No	No		
SYSTEM IEM		DT_IT_TY_VID	Number 12	NUMBER(12)	NULL	No	Yes		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
SYSTEM IEM		DT_IT_TY_VID	Numb er	NUMBER(12)	NULL	No	Yes		
SYSTEM IEM		INP_MED_FMT_VID	Numb er	NUMBER(12)	NULL	No	No		
SYSTEM IEM		INTF_VID	Numb er	NUMBER(12)	NULL	No	Yes		
SYSTEM IEM		MESSAGE_VID	Numb er	NUMBER(12)	NULL	No	Yes		
SYSTEM IEM		MESSAGE_VID	Numb er	NUMBER(12)	NULL	No	Yes		
SYSTEM IEM		MI_VID	Numb er	NUMBER(12)	NULL	No	Yes		
SYSTEM IEM		MI_VID	Numb er	NUMBER(12)	NULL	No	Yes		
SYSTEM IEM		MOD_DAT	Date	DATE	NOT NULL	No	No		
SYSTEM IEM		OUT_MED_FMT_VID	Numb er	NUMBER(12)	NULL	No	No		
SYSTEM IEM		SHADE_FL	String	CHAR(1)	NOT NULL	No	No		
SYSTEM IEM		SYS_IEM_VID	Numb er	NUMBER(12)	NOT NULL	Yes	No		
SYSTEM IEM		SYS_VID_1	Numb er	NUMBER(12)	NULL	No	Yes		
SYSTEM IEM		SYS_VID_2	Numb er	NUMBER(12)	NULL	No	Yes		
SYSTEM TYPE ASSOCIATION	REL_SYS_TY_ID	SY_TY_ID	String	VARCHAR(50)	NOT NULL	Yes	Yes		
SYSTEM TYPE ASSOCIATION	REL_TYPE	REL_TYPE	String	CHAR(1)	NULL	No	No		
SYSTEM TYPE ASSOCIATION	SY_TY_ASN_ID	SY_TY_ASN_ID	String	VARCHAR(50)	NOT NULL	Yes	No		
SYSTEM TYPE ASSOCIATION	SYS_TY_ID	SY_TY_ID	String	VARCHAR(50)	NOT NULL	Yes	Yes		
SYSTEM TYPE ASSOCIATION		AK_ID	Numb er	NUMBER(12)	NOT NULL	No	No		
SYSTEM TYPE ASSOCIATION	ARCHIVE_DATE	ARCHIVE_DATE	Date	DATE	NULL	No	No		
SYSTEM TYPE ASSOCIATION	CLS_CODE	CLS_CODE	String	VARCHAR(35)	NOT NULL	No	No		
SYSTEM TYPE ASSOCIATION	CREATE_DATE	CREATE_DATE	Date	DATE	NOT NULL	No	No		
SYSTEM TYPE ASSOCIATION	CURRENT_FLAG	CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
SYSTEM TYPE ASSOCIATION	MOD_DATE	MOD_DATE	Date	DATE	NOT NULL	No	No		
SYSTEM TYPE ASSOCIATION	SHADE_FL	SHADE_FL	String	CHAR(1)	NOT NULL	No	No		
SYSTEM TYPE ASSOCIATION	SY_TY_VID	SY_TY_VID	Numb er	NUMBER(12)	NOT NULL	Yes	Yes		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
SYSTEM TYPE ASSOCIATION		SY_TY_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
SYSTEM TYPE TRANSMISSION INFO	ANTN_TY_NM	ANTN_TY_NM	String	VARCHAR2(50)	NULL	No	No		
SYSTEM TYPE TRANSMISSION INFO	COMM_MODE	COMM_MODE	String	VARCHAR2(250)	NULL	No	No		
SYSTEM TYPE TRANSMISSION INFO	DATA_RATE	DATA_RATE	Number	NUMBER(12)	NULL	No	No		
SYSTEM TYPE TRANSMISSION INFO	NUM_CHANNELS	NUM_CHANNELS	Number	NUMBER(12)	NULL	No	No		
SYSTEM TYPE TRANSMISSION INFO	OH_RATE	OH_RATE	Number	NUMBER(12)	NULL	No	No		
SYSTEM TYPE TRANSMISSION INFO	RX_FREQ_HIGH_DISP_UNITS	RX_FREQ_HIGH_DISP_UNITS	String	VARCHAR2(5)	NULL	No	No		
SYSTEM TYPE TRANSMISSION INFO	RX_FREQ_HIGH_HZ	RX_FREQ_HIGH_HZ	Number	NUMBER(15)	NULL	No	No		
SYSTEM TYPE TRANSMISSION INFO	RX_FREQ_LOW_DISP_UNITS	RX_FREQ_LOW_DISP_UNITS	String	VARCHAR2(5)	NULL	No	No		
SYSTEM TYPE TRANSMISSION INFO	RX_FREQ_LOW_HZ	RX_FREQ_LOW_HZ	Number	NUMBER(15)	NULL	No	No		
SYSTEM TYPE TRANSMISSION INFO	SY_TY_ID	SY_TY_ID	String	VARCHAR2(50)	NOT NULL	Yes	Yes		
SYSTEM TYPE TRANSMISSION INFO	TX_FREQ_HIGH_DISP_UNITS	TX_FREQ_HIGH_DISP_UNITS	String	VARCHAR2(5)	NULL	No	No		
SYSTEM TYPE TRANSMISSION INFO	TX_FREQ_HIGH_HZ	TX_FREQ_HIGH_HZ	Number	NUMBER(15)	NULL	No	No		
SYSTEM TYPE TRANSMISSION INFO	TX_FREQ_LOW_DISP_UNITS	TX_FREQ_LOW_DISP_UNITS	String	VARCHAR2(5)	NULL	No	No		
SYSTEM TYPE TRANSMISSION INFO	TX_FREQ_LOW_HZ	TX_FREQ_LOW_HZ	Number	NUMBER(15)	NULL	No	No		
SYSTEM TYPE TRANSMISSION INFO		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
SYSTEM TYPE TRANSMISSION INFO		ARCHIVE_DATE	Date	DATE	NULL	No	No		
SYSTEM TYPE TRANSMISSION INFO		CLS_CODE	String	VARCHAR2(35)	NOT NULL	No	No		
SYSTEM TYPE TRANSMISSION INFO		CREATE_DATE	Date	DATE	NOT NULL	No	No		
SYSTEM TYPE TRANSMISSION INFO		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
SYSTEM TYPE TRANSMISSION INFO		MOD_DATE	Date	DATE	NOT NULL	No	No		
SYSTEM TYPE TRANSMISSION INFO		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
SYSTEM TYPE TRANSMISSION INFO		SY_TY_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
SYSTEM TYPE-INTERFACE TYPE	INTERFACE TYPE IDENTIFIER	INTF_TY_ID	String	VARCHAR2(50)	NOT NULL	Yes	Yes		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
SYSTEM TYPE- INTERFACE TYPE	SY_TY_ID	SY_TY_ID	String	VARCHAR 2(50)	NOT NULL	Yes	Yes		
SYSTEM TYPE- INTERFACE TYPE	SY_TY_INTF_TY_ID	SY_TY_INTF_TY_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No		
SYSTEM TYPE- INTERFACE TYPE	AK_ID	AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
SYSTEM TYPE- INTERFACE TYPE	ARCHIVE_ DATE	ARCHIVE_ DATE	Date/Time	DATE	NULL	No	No		
SYSTEM TYPE- INTERFACE TYPE	CLS_CODE	CLS_CODE	String	VARCHAR R2(35)	NOT NULL	No	No		
SYSTEM TYPE- INTERFACE TYPE	CREATE_ATE	CREATE_ATE	Date/Time	DATE	NOT NULL	No	No		
SYSTEM TYPE- INTERFACE TYPE	CURRENT_FLAG	CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
SYSTEM TYPE- INTERFACE TYPE	INTF_TY_VID	INTF_TY_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
SYSTEM TYPE- INTERFACE TYPE	MOD_DAT	MOD_DAT	Date/Time	DATE	NOT NULL	No	No		
SYSTEM TYPE- INTERFACE TYPE	SHADE_FL	SHADE_FL	String	CHAR(1)	NOT NULL	No	No		
SYSTEM TYPE- INTERFACE TYPE	SY_TY_VID	SY_TY_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
SYSTEM TYPE- SOFTWARE ITEM VERSION	SW_IT_VER_ID	SW_IT_VER_ID	String	VARCHAR 2(50)	NOT NULL	Yes	Yes		
SYSTEM TYPE- SOFTWARE ITEM VERSION	SY_TY_ID	SY_TY_ID	String	VARCHAR 2(50)	NOT NULL	Yes	Yes		
SYSTEM TYPE- SOFTWARE ITEM VERSION	SY_TY_SW_IT_VER_ID	SY_TY_SW_IT_VER_ID	String	VARCHAR 2(50)	NOT NULL	Yes	No		
SYSTEM TYPE- SOFTWARE ITEM VERSION	AK_ID	AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
SYSTEM TYPE- SOFTWARE ITEM VERSION	ARCHIVE_ DATE	ARCHIVE_ DATE	Date/Time	DATE	NULL	No	No		
SYSTEM TYPE- SOFTWARE ITEM VERSION	CLS_CODE	CLS_CODE	String	VARCHAR R2(35)	NOT NULL	No	No		
SYSTEM TYPE- SOFTWARE ITEM VERSION	CREATE_ATE	CREATE_ATE	Date/Time	DATE	NOT NULL	No	No		
SYSTEM TYPE- SOFTWARE ITEM VERSION	CURRENT_FLAG	CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
SYSTEM TYPE- SOFTWARE ITEM VERSION	INFO_ID	INFO_ID	String	VARCHAR R2(50)	NULL	No	No		
SYSTEM TYPE- SOFTWARE ITEM VERSION	INFO_VID	INFO_VID	Number	NUMBER(12)	NULL	No	No		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
SYSTEM TYPE-SOFTWARE ITEM VERSION		MOD_DATE	Date	DATE	NOT NULL	No	No		
SYSTEM TYPE-SOFTWARE ITEM VERSION		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
SYSTEM TYPE-SOFTWARE ITEM VERSION		SW_IT_VERSION	Number	NUMBER(12)	NOT NULL	Yes	Yes		
SYSTEM TYPE-SOFTWARE ITEM VERSION		SY_TY_SW_IT_VERSION	Number	NUMBER(12)	NOT NULL	Yes	No		
SYSTEM TYPE-SOFTWARE ITEM VERSION		SY_TY_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
SYSTEM TYPE-SOFTWARE ITEM VERSION		USER_ID	String	VARCHAR2(50)	NULL	No	No		
SYSTEM TYPE-SOFTWARE ITEM VERSION		USER_VID	Number	NUMBER(12)	NULL	No	No		
TASK-MISSION-AREA	MISSION-AREA TYPE CODE	MSN_AR_TYP_CD	String	VARCHAR2(35)	NOT NULL	Yes	Yes	(16078) (A) THE CODE THAT DENOTES A CLASS OF MISSION-AREA.	
TASK-MISSION-AREA	TASK-MISSION-AREA DESCRIPTION TEXT	TASK_MSN_AR_DTX	String	VARCHAR2(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A MISSION-AREA-TASK.	
TASK-MISSION-AREA		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
TASK-MISSION-AREA		ARCH_ID	String	VARCHAR2(50)	NOT NULL	Yes	Yes		
TASK-MISSION-AREA		ARCHIVE_DATE	Date	DATE	NULL	No	No		
TASK-MISSION-AREA		CLS_CODE	String	VARCHAR2(35)	NOT NULL	No	No		
TASK-MISSION-AREA		CREATE_DATE	Date	DATE	NOT NULL	No	No		
TASK-MISSION-AREA		CURRENT_FLAG	String	CHAR(1)	NOT NULL	No	No		
TASK-MISSION-AREA		MOD_DATE	Date	DATE	NOT NULL	No	No		
TASK-MISSION-AREA		MSN_AR_VID	Number	NUMBER(12)	NOT NULL	Yes	Yes		
TASK-MISSION-AREA		SHADE_FLAG	String	CHAR(1)	NOT NULL	No	No		
Y2K COMPLIANCE LEVEL CODE	Y2K COMPLIANCE LEVEL CODE	Y2K_COMP_LVL_CD	String	VARCHAR2(50)	NOT NULL	Yes	No	THE CODE WHICH DENOTES A Y2K COMPLIANCE LEVEL	
Y2K COMPLIANCE LEVEL CODE	Y2K COMPLIANCE LEVEL CODE DESCRIPTION TEXT	Y2K_COMP_LVL_CD_DTX	String	VARCHAR2(250)	NULL	No	No	THE TEXT WHICH DESCRIBES THE LEVEL OF Y2K COMPLIANCE	
Y2K COMPLIANCE LEVEL CODE		AK_ID	Number	NUMBER(12)	NOT NULL	No	No		
Y2K COMPLIANCE LEVEL CODE		ARCHIVE_DATE	Date	DATE	NULL	No	No		

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Entity Name	Attribute Name	Col. Nm.	Dom.	Datatype	Null	PK	FK	Attribute Definition	Note
Y2K COMPLIANCE LEVEL CODE		CLS_CODE	String	VARCHAR R2(35)	NOT NULL	No	No		
Y2K COMPLIANCE LEVEL CODE		CREATE_D ATE	Date me	DATE	NOT NULL	No	No		
Y2K COMPLIANCE LEVEL CODE		CURRENC Y_FLAG	String	CHAR(1)	NOT NULL	No	No		
Y2K COMPLIANCE LEVEL CODE		MOD_DAT E	Date me	DATE	NOT NULL	No	No		
Y2K COMPLIANCE LEVEL CODE		SHADE_FL AG	String	CHAR(1)	NOT NULL	No	No		

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**ANNEX E. MAPPING OF JCAPS ENTITY-LEVEL DATA REQUIREMENTS
TO PROPOSED JCAPS VIEW OF CADM 2.0 AND ARMY CADM**

E-1

Annex E (Mapping JCAPS Entities)

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Mapping JCAPS Data Requirements to IDA Proposal

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Table E-1. Mapping JCAPS Entities to Support Provided by Proposed JCAPS View of CADM 2.0 and Army CADM

JCAPS Entity Logical Name	JCAPS Entity Column Name	JCAPS Entity Definition	Supported by IDA Proposed CADM View	Source for Proposed Entity
ARCHITECTURE	ARCHITECTURE	THE STRUCTURE OF COMPONENTS, THEIR RELATIONSHIPS, AND THE PRINCIPLES AND GUIDELINES GOVERNING THEIR DESIGN AND EVOLUTION OVER TIME.	ARCHITECTURE	CADM 1.0
ARCHITECTURE DOCUMENT	AR_DOCUMENT	AN ASSOCIATION OF AN ARCHITECTURE WITH A DOCUMENT.	ARCHITECTURE DOCUMENT	CADM 1.0
ARM CODE	ARM_CODE	THE LIST OF AVAILABLE ARM CODES	ORGANIZATION-TYPE ARM CODE	CADM 1.0 (DoD Standard)
ASSET OWNERSHIP	ASSET_OWN	THE DESCRIPTION AND PERCENTAGE OF OWNERSHIP OF A SYSTEM	NODE-SYSTEM-ASSET-OWNERSHIP	JCAPS
CIRCUIT-IER ASSOCIATION	CIRCUIT_IER_ASN	THE RELATIONSHIP BETWEEN CIRCUIT AND INFORMATION EXCHANGE REQUIREMENT	COMMUNICATION-CIRCUIT-IER-ASSOCIATION	JCAPS
COMMAND-CONTROL-ELEMENT	C2E	INTEGRATED SYSTEMS OF DOCTRINE, PROCEDURES, ORGANIZATIONAL STRUCTURES, PERSONNEL, EQUIPMENT, FACILITIES, AND COMMUNICATIONS DESIGNED TO SUPPORT A COMMANDER'S EXERCISE OF COMMAND AND CONTROL ACROSS THE RANGE OF MILITARY OPERATIONS. (DERIVED FROM THE DOD DICTIONARY)	NODE, ORGANIZATION, ORGANIZATION-TYPE, NODE-ORGANIZATION-TYPE, and ORGANIZATION-LOCATION-POINT	CADM 1.0 CADM 1.0 (DoD Standard) CADM 1.0 (DoD Standard) CADM 1.0 CADM 1.0 Army CADM (based on DoD Standards)
COMMAND-CONTROL-ELEMENT-ORGANIZATION	C2E_ORG	AN ASSOCIATION OF A COMMAND-CONTROL-ELEMENT WITH AN ORGANIZATION.	NODE, ORGANIZATION, and NODE-ORGANIZATION	CADM 1.0 CADM 1.0 (DoD Standard) CADM 1.0
COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY	CCSD_AGENCY	THE AGENCY THAT SENDS OR RECEIVES ON A COMMAND AND CONTROL COMMUNICATIONS CIRCUIT.	COMMUNICATION-CIRCUIT-TYPE CCSD Agency Code	JCAPS
COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE	CCSD_PURPOSE_USE	THE PURPOSE, OR USE, OF A COMMAND AND CONTROL COMMUNICATIONS CIRCUIT.	COMMUNICATION-CIRCUIT-TYPE CCSD Purpose Use Code	JCAPS
COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE	CCSD_TYPE_SERVICE	A KIND OF SERVICE PROVIDED BY A COMMAND AND CONTROL COMMUNICATIONS CIRCUIT.	COMMUNICATION-CIRCUIT-TYPE CCSD Type Service Code	JCAPS
COMMUNICATION LINK TYPE	COMM_LNK_TY	THE GENERIC TYPES OF COMMUNICATION LINKS	COMMUNICATION-LINK TYPE	JCAPS
COMMUNICATION-CHANNEL	COM_CHANNEL	A LOGICAL PARTITION OF A PHYSICAL DEVICE OVER WHICH COMMUNICATIONS ARE CONVEYED.	COMMUNICATION-CHANNEL	JCAPS
COMMUNICATION-CIRCUIT	COM_CRCT	A CIRCUIT USED FOR COMMUNICATIONS.	COMMUNICATION-CIRCUIT	JCAPS
COMMUNICATION-CIRCUIT-TYPE	COM_CIR_TY	A KIND OF LOGICAL CIRCUIT FOR COMMUNICATIONS.	COMMUNICATION-CIRCUIT-TYPE	JCAPS

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JCAPS Entity Logical Name	JCAPS Entity Column Name	JCAPS Entity Definition	Supported by IDA Proposed CADM View	Source for Proposed Entity
COMMUNICATION-LINK	COMMUNICATION_LINK	A CONNECTION BETWEEN TWO COMMUNICATIONS NODES.	COMMUNICATION-LINK (subtype of NODE-LINK)	CADM 1.0 (from NODE-LINK Category code)
COMMUNICATION-MEDIUM	COM_MED	SPECIFICATION OF COMMUNICATIONS MEDIA USED TO CONNECT NODES.	COMMUNICATION-MEDIUM	CADM 1.0
COST MANAGEMENT	COST_MAN	THE DOLLAR AMOUNTS ASSOCIATED WITH VARIOUS ASPECTS OF THE MANAGEMENT OF A SYSTEM BY TIME PERIOD	NODE-SYSTEM-COST-MANAGEMENT	JCAPS
COUNTRY	COUNTRY	(39) (A) A NATION OF THE WORLD.	COUNTRY	Army CADM (DoD Standard)
DATABASE_VERSION	DATABASE_VERSION	JCAPS INTERNAL DATABASE IDENTIFIER	N/A [Implementation-unique requirement]	N/A
DATA-ITEM	DATA_ITEM	A MATERIEL-ITEM REPRESENTING AN INSTANCE OF INFORMATION.	DATA-ITEM	CADM 1.0
DATA-ITEM-TYPE	DATA_ITEM_TYPE	A CLASS OF INFORMATION ABOUT A DATA-ITEM.	DATA-ITEM-TYPE	CADM 1.0
DOCUMENT	DOCUMENT	(119/1) (A) RECORDED INFORMATION REGARDLESS OF PHYSICAL FORM.	DOCUMENT	CADM 1.0 (DoD Standard)
DOCUMENT MODEL OBJECT ASSOCIATION	DOC_MDL_ASN	THE RELATIONSHIP BETWEEN A DOCUMENT (AFV2 PRODUCT) AND ITS MODEL OBJECTS (AFV2 COMPONENTS)	N/A [Implementation-unique requirement]	N/A
DOCUMENT-IER ASSOCIATION	DOC_IER_ASN	THE RELATIONSHIP BETWEEN A DOCUMENT (AFV2 PRODUCT) AND AN IER	GUIDANCE-DOCUMENT	CADM 1.0 (DoD Standard)
DRAW POINTS	DRAW_POINTS	A JCAPS SPECIFIC DRAW OBJECT TABLE FOR REPRESENTING POINTS	N/A [Implementation-unique requirement]	N/A
DRAWGRPMEMBERS	DRAWGRPMEMBERS	A DRAW-OBJECTS TABLE FOR DRAWING THE MEMBERS OF A GROUP.	N/A [Implementation-unique requirement]	N/A
DRAW-MODEL OBJECT ASSOCIATION	DRAW_MDL_ASN	THE RELATIONSHIP BETWEEN A MODEL OBJECT (AFV2 COMPONENT) AND ITS JCAPS SPECIFIC GRAPHICAL REPRESENTATION INFORMATION	N/A [Implementation-unique requirement]	N/A
DRAWOBJECT	DRAWOBJECT	A JCAPS SPECIFIC DRAW-OBJECTS TABLE.	N/A [Implementation-unique requirement]	N/A
DRAWTEXT	DRAWTEXT	A JCAPS SPECIFIC DRAW-OBJECTS TABLE FOR REPRESENTING TEXT.	N/A [Implementation-unique requirement]	N/A
ECHELON	ECHELON	A SUBDIVISION OF A HEADQUARTERS OR A SEPARATE LEVEL OF COMMAND.	ORGANIZATION-TYPE ECHELON CODE	CADM 1.0 (DoD Standard)
EXCHANGE-NEED-LINE-REQUIREMENT	EXCN_ND_LN_REQMT	A REQUIREMENT THAT IS THE LOGICAL EXPRESSION OF THE NEED TO TRANSFER INFORMATION (WHOSE CONTENT IS SPECIFIED BY REFERENCE TO INFORMATION-EXCHANGE-REQUIREMENT) AMONG OPERATIONAL ELEMENTS (ORGANIZATIONS OR ORGANIZATION-TYPES) THAT REFERENCES RELATED TASKS, THE PROVIDING NODE/OPERATIONAL ELEMENT, AND THE RECEIVING NODE/OPERATIONAL ELEMENT.	EXCHANGE-NEED-LINE-REQUIREMENT (a subtype of INTEROPERABILITY-REQUIREMENT)	CADM 1.0 (formerly a subtype of REQUIREMENT)

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JCAPS Entity Logical Name	JCAPS Entity Column Name	JCAPS Entity Definition	Supported by IDA Proposed CADM View	Source for Proposed Entity
FUNCTION	FUNCTION	THE SPECIFICATION OF HOW INFORMATION OBJECTS ARE SYNTHESIZED TO SUPPORT THE AUTOMATION OF AN ACTIVITY OR EXCHANGE REQUIREMENT.	SYSTEM-FUNCTION (a subtype of PROCESS-ACTIVITY)	CADM 1.0
FUNCTIONAL-AREA INFORMATION-EXCHANGE-REQUIREMENT	FUNCTIONAL_AREA	(4198) (A) A MAJOR AREA OF RELATED ACTIVITY. A REQUIREMENT FOR THE CONTENT OF AN INFORMATION FLOW.	FUNCTIONAL-AREA INFORMATION-REQUIREMENT and INFO-EXCH-REQ (both subtypes of INTEROPERABILITY-REQUIREMENT)	CADM 1.0 (DoD Standard) CADM 1.0 (formerly called INFORMATION-EXCHANGE-REQUIREMENT) CADM 2.0 (formerly called EXCHANGE-NEED-LINE-IER; formerly a subtype of REQUIREMENT)
INTERFACE	INTF	A GENERIC CONNECTION BETWEEN C2E'S (OPFAC'S) OR SYSTEMS	INTERFACE	JCAPS
INTERFACE TYPE	INTF_TY	THE GENERIC TYPES OF INTERFACES	INTERFACE-TYPE	JCAPS
INTERFACE-IER ASSOCIATION	INTERFACE_IER_ASN	THE RELATIONSHIP BETWEEN AN INTERFACE AND INFORMATION EXCHANGE REQUIREMENT	INTERFACE-IER-ASSOCIATION	JCAPS
LINK-IER ASSOCIATION	LINK_IER_ASN	THE RELATIONSHIP BETWEEN LINKS AND INFORMATION EXCHANGE REQUIREMENTS	COMMUNICATION-LINK-IER-ASSOCIATION	JCAPS
MESSAGE	MESSAGE	A COMMUNICATION TRANSMITTED BY SPOKEN OR WRITTEN WORDS, SIGNALS, OR OTHER MEANS FROM ONE PERSON OR GROUP TO ANOTHER.	INFORMATION-REQUIREMENT, MESSAGE-STANDARD, and INFORMATION-ELEMENT	CADM 1.0 (formerly INFORMATION-EXCHANGE-REQUIREMENT) CADM 1.0 CADM 1.0 (formerly ICOM)
MISSION-AREA	MISSION_AREA	(2305) (A) THE GENERAL CLASS TO WHICH AN OPERATIONAL MISSION BELONGS.	MISSION-AREA	CADM 1.0 (DoD Standard)
MISSION-AREA-FUNCTIONAL-AREA ORGANIZATION	MS_AR_F_AR	AN ASSOCIATION OF A MISSION-AREA WITH A FUNCTIONAL-AREA.	MISSION-AREA-FUNCTIONAL-AREA ORGANIZATION	CADM 1.0 (DoD Standard)
PROCESS-ACTIVITY	PROCESS_ACTIVITY	(345)(A) AN ADMINISTRATIVE STRUCTURE WITH A MISSION. (4204) (A) THE REPRESENTATION OF A MEANS BY WHICH A PROCESS ACTS ON SOME INPUT TO PRODUCE A SPECIFIC OUTPUT.	PROCESS-ACTIVITY	CADM 1.0 (DoD Standard)

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JCAPS Entity Logical Name	JCAPS Entity Column Name	JCAPS Entity Definition	Supported by IDA Proposed CADM View	Source for Proposed Entity
QUERIES	QUERIES	JCAPS SPECIFIC USER DEFINED QUERIES	N/A [Implementation-unique requirement]	N/A
QUERY ENTRIES	QUERY_ENTRIES	JCAPS SPECIFIC USER DEFINED QUERIES	N/A [Implementation-unique requirement]	N/A
RELATIONSHIP_ASN	RELATIONSHIP_ASN	A DRAW-OBJECT TABLE FOR BUILDING RELATIONSHIPS BETWEEN ORGANIZATIONS AND UNITS.	N/A [Implementation-unique requirement]	ORGANIZATION-ASSOCIATION
REPORT_FIELDS	REPORT_FIELDS	[Definition not provided in JCAPS 2.1]	N/A [Implementation-unique requirement]	N/A
REPORTS	REPORTS	[Definition not provided in JCAPS 2.1]	N/A [Implementation-unique requirement]	N/A
SERVICE CODE	SERVICE_CODE	THE LIST OF AVAILABLE SERVICE CODES	ORGANIZATION-TYPE SERVICE CODE	CADM 1.0 (DoD Standard)
SHADE_TEMP	SHADE_TEMP	[Definition not provided in JCAPS 2.1]	N/A [Implementation-unique requirement]	N/A
SOFTWARE ITEM VERSION	SW_ITEM_VER	A SPECIFIC VERSION OF SOFTWARE	SOFTWARE-ITEM	CADM 1.0
SOFTWARE-ITEM	SW_ITEM	A SET OF INSTRUCTIONS THAT GOVERN THE OPERATION OF DATA PROCESSING EQUIPMENT.	SOFTWARE-ITEM	CADM 1.0
SYSTEM	SYSTEM	(326) (D) AN ORGANIZED ASSEMBLY OF INTERACTIVE COMPONENTS AND PROCEDURES FORMING A UNIT.	NODE-SYSTEM	CADM 1.0
SYSTEM CATEGORY	SYS_CAT	THE LISTING AND HIERARCHY OF AVAILABLE SYSTEM CATEGORIES AND SUBCATEGORIES	SYSTEM-TYPE	CADM 1.0
SYSTEM IEM	SYS_IEM	THE RELATIONSHIP BETWEEN SYSTEM AND INFORMATION EXCHANGE MATRIX	INFORMATION-EXCHANGE-MATRIX, INFORMATION-EXCHANGE-MATRIX-ELEMENT	CADM 1.0 CADM 2.0
SYSTEM SOFTWARE ITEM VERSION	SYS_SW_IT_VER	THE RELATIONSHIP BETWEEN SYSTEM AND SOFTWARE ITEM VERSION	NODE-SYSTEM-SOFTWARE-ITEM	JCAPS
SYSTEM TRANSMISSION INFO	SY_XM_INFO	THE TRANSMISSION INFORMATION ASSOCIATED WITH A SPECIFIC SYSTEM	NODE-SYSTEM-TRANSMISSION	JCAPS
SYSTEM TYPE ASSOCIATION	SYSTEM_TY_ASN	THE RELATIONSHIPS BETWEEN TYPE OF SYSTEMS	SYSTEM-ASSOCIATION	CADM 1.0
SYSTEM TYPE TRANSMISSION INFO	SY_TY_XM_INFO	THE TRANSMISSION INFORMATION ASSOCIATED WITH A SYSTEM TYPE	SYSTEM-TRANSMISSION	JCAPS
SYSTEM TYPE-INTERFACE TYPE	SY_TY_INTF_TY	THE RELATIONSHIP BETWEEN SYSTEM TYPES AND INTERFACE TYPES	SYSTEM-INTERFACE-TYPE	JCAPS
SYSTEM TYPE-SOFTWARE ITEM VERSION	SY_TY_SW_IT_VER	THE RELATIONSHIP BETWEEN SYSTEM TYPE AND SOFTWARE ITEM VERSION	SYSTEM-SOFTWARE-ITEM	CADM 1.0

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JCAPS Entity Logical Name	JCAPS Entity Column Name	JCAPS Entity Definition	Supported by IDA Proposed CADM View	Source for Proposed Entity
SYSTEM-ASSOCIATION	SYSTEM_ASN	AN ASSOCIATION OF A SYSTEM WITH ANOTHER SYSTEM. (PROPOSED REPLACEMENT FOR: SYSTEM-ASSOCIATION--(12546/1) (D) AN ASSOCIATION BETWEEN A SYSTEM AND ANOTHER SYSTEM INDICATING CONNECTIVITY BETWEEN THE SYSTEMS.)	NODE-SYSTEM-ASSOCIATION	JCAPS
SYSTEM-TYPE	SYSTEM_TYPE	(9083) (D) A CATEGORY OF SYSTEM.	SYSTEM	CADM 1.0
TASK-MISSION-AREA	TASK_MISSION_AREA	AN ASSOCIATION OF A TASK WITH A MISSION-AREA.	TASK-MISSION-AREA	CADM 1.0 (derived from a DoD Standard)
TEMP_TABLE	TEMP_TABLE	[Definition not provided in JCAPS 2.1]	N/A [Implementation-unique requirement]	N/A
UNIVERSAL-JOINT-TASK	UJTL_TASK	A SPECIFIC TASK IN THE UNIVERSAL JOINT TASK LIST.	TASK, MISSION-ESSENTIAL-TASK	CADM 1.0 (DoD Standard)
USER CODE	USER_CD	THE LIST OF AVAILABLE USER CODES	CODE User Code	JCAPS
USER_DEF_PROP_DIC T	USER_DEF_PROP_DIC T	[Definition not provided in JCAPS 2.1]	USER-DEFINED-PROPERTY-DICTIONARY	JCAPS
USER_DEF_PROP_DIC T_ENUMS	USER_DEF_PROP_DIC T_ENUMS	[Definition not provided in JCAPS 2.1]	USER-DEFINED-PROPERTY-DICTIONARY-ENUMERATION	JCAPS
USER_DEF_PROPS	USER_DEF_PROPS	[Definition not provided in JCAPS 2.1]	USER-DEFINED-PROPERTY	JCAPS
USER-PREFERENCE-ARCHITECTURE	USER_ARCHITECTURE	AN ASSOCIATION OF A USER-PREFERENCE WITH AN ARCHITECTURE.	N/A [Implementation-unique requirement]	N/A
USER-PREFERENCE-DOCUMENT-SHARE-PERMISSION	USER_DOCUMENT	AN ASSOCIATION OF A USER-PREFERENCE WITH A DOCUMENT.	N/A [Implementation-unique requirement]	N/A
VISUAL-REPRESENTATION-SYMBOL	VSL_RPRTN_SYM	A SYMBOL THAT IS USED TO REPRESENT SOMETHING VISUALLY.	N/A [Implementation-unique requirement]	N/A
WORKSPACE	WORKSPACE	AN ENVIRONMENT IN WHICH WORK IS PERFORMED.	N/A [Implementation-unique requirement]	N/A
WORKSPACE-ARCHITECTURE	WS_ARCHITECTURE	AN ASSOCIATION OF A WORKSPACE WITH AN ARCHITECTURE.	N/A [Implementation-unique requirement]	N/A
WORKSPACE-DOCUMENT	WORKSPACE_DOCUMENT	AN ASSOCIATION OF A WORKSPACE WITH A DOCUMENT.	N/A [Implementation-unique requirement]	N/A
WORLD_Q	WORLD_Q	[Definition not provided in JCAPS 2.1]	N/A [Implementation-unique requirement]	N/A
Y2K COMPLIANCE LEVEL CODE	Y2K_COMP_LVL_CD	THE CODE WHICH REPRESENT THE LEVEL OF Y2K COMPLIANCE OF A SYSTEM	SYSTEM Year 2000 Compliance Level Code, INTERFACE-TYPE Year 2000 Compliance Level Code	JCAPS JCAPS

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**ANNEX F. MAPPING OF JCAPS ATTRIBUTE-LEVEL DATA REQUIREMENTS
TO PROPOSED JCAPS VIEW OF CADM 2.0 AND ARMY CADM**

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Annex F (Mapping JCAPS Attributes)

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Mapping JCAPS Data Requirements to IDA Proposal

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Table F-1. Mapping JCAPS Attributes to Support Provided by Proposed JCAPS View of CADM 2.0 and Army CADM¹⁹

JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm. AR_CLSN_CD	JCAPS Attribute Definition	Supported by IDA Proposed CADM View CAVEATED-SECURITY-CLASSIFICATION IDENTIFIER (FK) and SECURITY-CLASSIFICATION CODE (FK) in ARCHITECTURE
ARCHITECTURE	ARCHITECT NAME	ARCHITECT_NA ME	NAME OF THE ARCHITECT	Architect POC Identifier {JCAPS} (FK) in ARCHITECTURE
ARCHITECTURE	ARCHITECTURE DESCRIPTION TEXT	AR_DTX	THE TEXT THAT DESCRIBES AN ARCHITECTURE.	ARCHITECTURE Description Text
ARCHITECTURE	ARCHITECTURE OBJECTIVE TEXT	AR_OBJV_TX	THE TEXT THAT DESCRIBES THE AIM OF AN ARCHITECTURE.	ARCHITECTURE Objective Text
ARCHITECTURE	ARCHITECTURE PURPOSE CONSTRAINTS	AR_PURP_CONS TRNTS	THE CONSTRAINTS GIVEN FOR THIS ARCHITECTURE'S PURPOSE	ARCHITECTURE Purpose Constraint Text {JCAPS}
ARCHITECTURE	ARCHITECTURE SCOPE TEXT	AR_SCP_TX	THE TEXT THAT DESCRIBES THE EXTENT OF APPLICABILITY FOR AN ARCHITECTURE.	ARCHITECTURE Scope Text
ARCHITECTURE	ARCHITECTURE SPECIFIC INITIALIZATION FILE PATH TEXT	AR_SI_FIL_PATH	THE TEXT THAT DESCRIBES THE LOCATION OF A FILE THAT CONTAINS ARCHITECTURE ENVIRONMENTAL PARAMETERS.	N/A (implementation-specific)
ARCHITECTURE	ARCHITECTURE VIEW TYPE CODE	AR_VW_TV_CD	THE CODE THAT DENOTES A SPECIFIC VIEW OF AN ARCHITECTURE.	ARCHITECTURE View Type Code
ARCHITECTURE	ASSOCIATED FILE NAME	AR_SI_FIL_NM	NAME OF FILE ASSOCIATED WITH THE ARCHITECTURE	N/A (implementation-specific)
ARCHITECTURE	CONTROL NUMBER	CONTROL_NUM	THE ARCHITECTURE'S CONTROL NUMBER	N/A (implementation-specific)
ARCHITECTURE	PROCESS ACTIVITY IDENTIFIER	PRCS_ACTY_ID	THE IDENTIFIER OF THE ACTIVITY ASSOCIATED WITH THE ARCHITECTURE	PROCESS-ACTIVITY IDENTIFIER (FK) in ARCHITECTURE
ARCHITECTURE	SECTION IDENTIFIER	SECTION_ID	THE ARCHITECTURE'S SECTION IDENTIFIER	N/A (implementation-specific)
ARCHITECTURE	SHARE CATEGORY CODE	SHARE_CAT_CD	CODE WHICH DENOTES THE SHARE CATEGORY OF THE ARCHITECTURE	N/A (implementation-specific)
ARCHITECTURE	STATUS	STATUS	THE CURRENT STATUS OF THE ARCHITECTURE	ARCHITECTURE Status Code {JCAPS}

¹⁹ This table has all the attributes from the logical view of the JCAPS 2.1 physical schema data model except the attributes of the 17 implementation-specific entities noted in Table F-1 (above) DOCUMENT MODEL OBJECT ASSOCIATION; DRAW POINTS; DRAWGRPMEMBERS; DRAW-MODEL OBJECT ASSOCIATION; DRAWOBJECT; DRAWTEXT; QUERIES; QUERY ENTRIES; RELATIONSHIP_ASN; REPORT_FIELDS; REPORTS; USER-PREFERENCE-ARCHITECTURE-SHARE-PERMISSION; USER-PREFERENCE-DOCUMENT-SHARE-PERMISSION; VISUAL-REPRESENTATION-SYMBOL; WORKSPACE; WORKSPACE-ARCHITECTURE; and WORKSPACE-DOCUMENT.

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
ARCHITECTURE	SUMMARY DESCRIPTION TEXT	SUMMARY_DTX	TEXT WHICH DESCRIBES THE ARCHITECTURE	ARCHITECTURE Summary Description Text {JCAPS}
ARCHITECTURE DOCUMENT	ARCHITECTURE-DOCUMENT DESCRIPTION TEXT	AR_DOC_DTX	THE FREEFORM NARRATIVE THAT CHARACTERIZES AN ARCHITECTURE-DOCUMENT.	ARCHITECTURE-DOCUMENT Description Text {JCAPS}
ARCHITECTURE DOCUMENT	ARCHITECTURE-DOCUMENT IDENTIFIER	AR_DOC_ID	THE IDENTIFIER THAT REPRESENTS AN ARCHITECTURE-DOCUMENT.	ARCHITECTURE-DOCUMENT Identifier
ARCHITECTURE DOCUMENT	ARCHITECTURE-DOCUMENT ROLE CODE	AR_DOC_ROL_CD	THE CODE THAT REPRESENTS THE CLASS OF RELATIONSHIP THAT A DOCUMENT HAS FOR AN ARCHITECTURE.	ARCHITECTURE-DOCUMENT Role Code
ARCHITECTURE DOCUMENT	DOCUMENT IDENTIFIER	DOC_ID	THE IDENTIFIER THAT REPRESENTS A DOCUMENT	DOCUMENT IDENTIFIER (FK) in ARCHITECTURE-DOCUMENT
ARM CODE	ARM CODE DESCRIPTION TEXT	ARM_CODE_TXT	THE TEXT DESCRIPTION OF THE ARM CODE	ORGANIZATION-TYPE ARM CODE (definitions of domain values) in ORGANIZATION-TYPE
ARM CODE	ARM CODE IDENTIFIER	ARM_CODE_ID	THE IDENTIFIER THAT REPRESENTS AN ARM CODE	ORGANIZATION-TYPE ARM CODE (domain values) in ORGANIZATION-TYPE
ASSET OWNERSHIP	ASSET_OWN_ID	ASSET_OWN_ID	THE IDENTIFIER THAT REPRESENTS ASSET OWNERSHIP INFORMATION	NODE-SYSTEM-ASSET-OWNERSHIP Identifier {JCAPS}
ASSET OWNERSHIP	OWNERSHIP TYPE	AO_OWNERSHIP	THE TYPE OF OWNERSHIP	NODE-SYSTEM-ASSET-OWNERSHIP Type Code {JCAPS}
ASSET OWNERSHIP	PERCENT OWNERSHIP	AO_PERCENT	THE PERCENTAGE OF THE PARTICULAR TYPE OF OWNERSHIP	NODE-SYSTEM-ASSET-OWNERSHIP Percent Owned Quantity {JCAPS}
ASSET OWNERSHIP	SYS_ID		THE IDENTIFIER THAT REPRESENTS THE RELATED SYSTEM	SYSTEM Identifier (FK), NODE Identifier (FK), and NODE-SYSTEM Identifier (FK) in NODE-SYSTEM-ASSET-OWNERSHIP
CIRCUIT-IER ASSOCIATION	CIRCUIT-IER ASSOCIATION IDENTIFIER	CIRCUIT_IER_AS_N_ID	THE IDENTIFIER THAT REPRESENTS A CIRCUIT-IER RELATIONSHIP	COMMUNICATION-CIRCUIT-IER-ASSOCIATION Identifier {JCAPS}
CIRCUIT-IER ASSOCIATION	COMMUNICATION CIRCUIT IDENTIFIER	COM_CRCT_ID	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION CIRCUIT	COMMUNICATION-CIRCUIT Identifier {JCAPS} (FK) in COMMUNICATION-CIRCUIT-IER-ASSOCIATION
CIRCUIT-IER ASSOCIATION	INFORMATION EXCHANGE REQUIREMENT IDENTIFIER	IER_ID	THE IDENTIFIER THAT REPRESENTS AN IER	Info Exch Req GUIDANCE Identifier (FK) in COMMUNICATION-CIRCUIT-IER-ASSOCIATION
COMMAND-CONTROL-ELEMENT	COMMAND-CONTROL-ELEMENT ABBREVIATION NAME	C2E_ABRV_NM	THE ABBREVIATION FOR A COMMAND AND CONTROL ELEMENT'S NAME.	ORGANIZATION Current Abbreviated Name {JCAPS} and ORGANIZATION-TYPE Abbreviated Name
COMMAND-CONTROL-ELEMENT	COMMAND-CONTROL-ELEMENT DESCRIPTION TEXT	C2E_DSC_TX	THE TEXT THAT DESCRIBES A COMMAND AND CONTROL ELEMENT.	NODE-ORGANIZATION Description Text {JCAPS}
COMMAND-CONTROL-ELEMENT	COMMAND-CONTROL-ELEMENT GEOLOCATION LATITUDE	C2E_GEOLOC_LAT	THE LATITUDE OF A COMMAND AND CONTROL ELEMENT'S GEOGRAPHIC LOCATION	POINT LATITUDE COORDINATE for a specific instance of ORGANIZATION-LOCATION-POINT
COMMAND-CONTROL-ELEMENT	COMMAND-CONTROL-ELEMENT GEOLOCATION LONGITUDE	C2E_GEOLOC_LON	THE LONGITUDE OF A COMMAND AND CONTROL ELEMENT'S GEOLOCATION.	POINT LONGITUDE COORDINATE for a specific instance of ORGANIZATION-LOCATION-POINT

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
COMMAND-CONTROL-ELEMENT	COMMAND-CONTROL-ELEMENT IDENTIFIER	C2E_ID	THE IDENTIFIER THAT REPRESENTS A COMMAND AND CONTROL ELEMENT.	NODE Identifier, ORGANIZATION IDENTIFIER, and ORGANIZATION-TYPE IDENTIFIER
COMMAND-CONTROL-ELEMENT	COMMAND-CONTROL-ELEMENT LOCATION	C2E_LOCATION	THE LOCATION OF A COMMAND AND CONTROL ELEMENT	NODE Location Text {JCAPS}
COMMAND-CONTROL-ELEMENT	COMMAND-CONTROL-ELEMENT NAME	C2E_NM		ORGANIZATION Current Name {JCAPS} and ORGANIZATION-TYPE Name
COMMAND-CONTROL-ELEMENT	COMMAND-CONTROL-ELEMENT NATION NAME	C2E_NTN_NM	THE NAME OF THE NATION A COMMAND AND CONTROL ELEMENT SERVES.	COUNTRY NAME
COMMAND-CONTROL-ELEMENT	ECHELON IDENTIFIER	ECHELON_ID	THE IDENTIFIER THAT REPRESENTS THE COMMAND AND CONTROL ELEMENT'S ECHELON	ORGANIZATION-TYPE ECHELON CODE
COMMAND-CONTROL-ELEMENT	USER CODE	USER_CD	THE USER CODE ASSOCIATED WITH THE COMMAND AND CONTROL ELEMENT	NODE User Code {JCAPS}
COMMAND-CONTROL-ELEMENT-ORGANIZATION	COMMAND-CONTROL-ELEMENT IDENTIFIER	C2E_ID	THE IDENTIFIER THAT REPRESENTS A COMMAND AND CONTROL ELEMENT.	NODE Identifier, ORGANIZATION IDENTIFIER, and ORGANIZATION-TYPE IDENTIFIER
COMMAND-CONTROL-ELEMENT-ORGANIZATION	COMMAND-CONTROL-ELEMENT-ORGANIZATION DESCRIPTION TEXT	C2E_ORG_DSC_TX	THE TEXT THAT DESCRIBES A COMMAND-CONTROL-ELEMENT-ORGANIZATION.	NODE-ORGANIZATION Description Text {JCAPS}
COMMAND-CONTROL-ELEMENT-ORGANIZATION	COMMAND-CONTROL-ELEMENT-ORGANIZATION IDENTIFIER	C2E_ORG_ID	THE IDENTIFIER THAT REPRESENTS A COMMAND-CONTROL-ELEMENT-ORGANIZATION RELATIONSHIP	NODE-ORGANIZATION Identifier
COMMAND-CONTROL-ELEMENT-ORGANIZATION	ORGANIZATION IDENTIFIER	ORG_ID	(7875) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	ORGANIZATION IDENTIFIER
COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY	COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY CODE	CCSD_AGENCY_CODE	THE CODE THAT DENOTES A PARTICULAR AGENCY THAT IS REPRESENTED IN A COMMAND-CONTROL-SERVICE-DESIGNATOR.	COMMUNICATION-CIRCUIT-TYPE CCSD Agency Code {JCAPS}
COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY	COMMAND-CONTROL-SERVICE-DESIGNATOR-AGENCY DESCRIPTION TEXT	AGN_DSC_TX	THE TEXT THAT DESCRIBES A PARTICULAR AGENCY THAT IS REPRESENTED IN A COMMAND-CONTROL-SERVICE-DESIGNATOR.	COMMUNICATION-CIRCUIT-TYPE CCSD Agency Code {JCAPS} (definitions of domain values)
COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE	COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE CODE	CCSD_PUR_USE_CODE	THE CODE THAT DENOTES A KIND OF COMMAND-CONTROL-SERVICE-DESIGNATOR.	COMMUNICATION-CIRCUIT-TYPE CCSD Purpose Use Code {JCAPS}
COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE	COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE DESCRIPTION TEXT	PRPS_USE_DSC_TX	THE TEXT THAT DESCRIBES A COMMAND-CONTROL-SERVICE-DESIGNATOR-PURPOSE-USE.	COMMUNICATION-CIRCUIT-TYPE CCSD Purpose Use Code {JCAPS} (definitions of domain values)

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
COMMAND-SERVICE-DESIGNATOR-TYPE-SERVICE	COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE CODE	CCSD_TYS_CODE	THE CODE THAT DENOTES A KIND OF COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE.	COMMUNICATION-CIRCUIT-TYPE CCSD Type Service Code {JCAPS}
COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE	COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE DESCRIPTION TEXT	TY_SVC_DSC_TX	THE TEXT THAT DESCRIBES A COMMAND-CONTROL-SERVICE-DESIGNATOR-TYPE-SERVICE.	COMMUNICATION-CIRCUIT-TYPE CCSD Type Service Code {JCAPS} (definitions of domain values)
COMMUNICATION LINK TYPE	COMMUNICATION LINK TYPE CODE	COMM_LNK_TY_CD	THE CODE GIVEN TO THE COMMUNICATION LINK	COMMUNICATION-LINK-TYPE Code {JCAPS}
COMMUNICATION LINK TYPE	COMMUNICATION LINK TYPE DESCRIPTION TEXT	COMM_LNK_TY_D_TXT	TEXT DESCRIBING THE COMMUNICATION LINK TYPE	COMMUNICATION-LINK-TYPE Description Text {JCAPS}
COMMUNICATION LINK TYPE	COMMUNICATION LINK TYPE IDENTIFIER	COMM_LNK_TY_ID	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION LINK TYPE	COMMUNICATION-LINK-TYPE Identifier {JCAPS}
COMMUNICATION LINK TYPE	COMMUNICATION LINK TYPE NAME	COMM_LNK_TY_NAME	THE NAME OF THE COMMUNICATION LINK	COMMUNICATION-LINK-TYPE Name {JCAPS}
COMMUNICATION LINK TYPE	COMMUNICATION LINK TYPE NUMBER OF CHANNELS	COMM_LNK_TY_NBR_CH	THE NUMBER OF CHANNELS ON THE COMMUNICATION LINK TYPE	COMMUNICATION-LINK-TYPE Channel Quantity {JCAPS}
COMMUNICATION LINK TYPE	COMMUNICATION LINK TYPE RATE	COMM_LNK_TY_RATE	THE DATA RATE OF THE COMMUNICATION LINK	COMMUNICATION-LINK-TYPE Data Rate {JCAPS}
COMMUNICATION LINK TYPE	FROM SYSTEM TYPE IDENTIFIER	SY_TY_ID	THE IDENTIFIER THAT REPRESENTS THE RECEIVING SYSTEM TYPE	Source SYSTEM Identifier (FK) in COMMUNICATION-LINK-TYPE
COMMUNICATION LINK TYPE	TO SYSTEM TYPE IDENTIFIER	SY_TY_ID	THE IDENTIFIER THAT REPRESENTS THE SENDING SYSTEM TYPE	Destination SYSTEM Identifier (FK) in COMMUNICATION-LINK-TYPE
COMMUNICATION-CHANNEL	CHILD COMMUNICATION CIRCUIT IDENTIFIER	COM_CRCT_ID	THE IDENTIFIER THAT REPRESENTS THE CHILD COMMUNICATION CIRCUIT	Child COMMUNICATION-CIRCUIT Identifier {JCAPS} (FK) in COMMUNICATION-CHANNEL {JCAPS}
COMMUNICATION-CHANNEL	CHILD COMMUNICATION LINK IDENTIFIER	COM_LNK_ID	THE IDENTIFIER THAT REPRESENTS THE CHILD COMMUNICATION LINK	Child Comm Link NODE-ASSOCIATION Group Identifier (FK) in COMMUNICATION-CHANNEL {JCAPS}
COMMUNICATION-CHANNEL	COMMUNICATION CHANNEL NUMBER	COM_CH_NUM	THE IDENTIFIER THAT REPRESENTS THE NUMBER THAT DESIGNATES A PARTICULAR COMMUNICATION-CHANNEL IN A GROUP OF COMMUNICATION-CHANNELS.	COMMUNICATION-CHANNEL Number Identifier {JCAPS}
COMMUNICATION-CHANNEL	COMMUNICATION-CHANNEL IDENTIFIER	COM_CH_ID	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION CHANNEL.	COMMUNICATION-CHANNEL Identifier {JCAPS}
COMMUNICATION-CHANNEL	PARENT COMMUNICATION LINK IDENTIFIER	COM_LNK_ID	THE IDENTIFIER THAT REPRESENTS THE PARENT COMMUNICATION LINK	Parent Comm Link NODE-ASSOCIATION Group Identifier (FK) in COMMUNICATION-CHANNEL {JCAPS}
COMMUNICATION-CIRCUIT	CCSD	CCSD		COMMUNICATION-CIRCUIT CCSD Identifier {JCAPS}

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
COMMUNICATION-CIRCUIT	COM_CIR_TY_ID	COM_CIR_TY_ID		COMMUNICATION-CIRCUIT-TYPE Identifier {JCAPS} (FK) in COMMUNICATION-CIRCUIT {JCAPS}
COMMUNICATION-CIRCUIT	COM_CRCT_DSC_TX	COM_CRCT_DS C_TX		COMMUNICATION-CIRCUIT Description Text {JCAPS}
COMMUNICATION-CIRCUIT	COMMUNICATION-CIRCUIT DATA TRANSFER RATE	CC_DATA_TRNS F_RT	THE RATE AT WHICH A COMMUNICATION-CIRCUIT CAN TRANSFER DATA.	COMMUNICATION-CIRCUIT Data Transfer Rate {JCAPS}
COMMUNICATION-CIRCUIT	COMMUNICATION-CIRCUIT IDENTIFIER	COM_CRCT_ID	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION-CIRCUIT.	COMMUNICATION-CIRCUIT Identifier {JCAPS}
COMMUNICATION-CIRCUIT	COMMUNICATION-CIRCUIT STATUS CODE	CC_STATUS_CODE	THE CODE THAT REPRESENTS THE STATE OF A COMMUNICATION-CIRCUIT.	COMMUNICATION-CIRCUIT Status Code {JCAPS}
COMMUNICATION-CIRCUIT	COMMUNICATION-CIRCUIT-TYPE CODE	COM_CIR_TY_CODE	THE CODE THAT DENOTES A KIND OF COMMUNICATION-CIRCUIT.	COMMUNICATION-CIRCUIT-TYPE Code {JCAPS} (FK) in COMMUNICATION-CIRCUIT {JCAPS}
COMMUNICATION-CIRCUIT	FROM_C2E_ID	C2E_ID		Source NODE Identifier (FK) in COMMUNICATION-CIRCUIT {JCAPS}
COMMUNICATION-CIRCUIT	FROM_SYS_ID	SYS_ID		Source SYSTEM Identifier (FK) and Source NODE-SYSTEM Identifier (FK) in COMMUNICATION-CIRCUIT {JCAPS}
COMMUNICATION-CIRCUIT	TO_C2E_ID	C2E_ID		Destination NODE Identifier (FK) in COMMUNICATION-CIRCUIT {JCAPS}
COMMUNICATION-CIRCUIT	TO_SYS_ID	SYS_ID		Destination SYSTEM Identifier (FK) and Destination NODE-SYSTEM Identifier (FK) in COMMUNICATION-CIRCUIT {JCAPS}
COMMUNICATION-CIRCUIT-TYPE	CCSD_AGENCY_CODE	CCSD_AGENCY_CODE		COMMUNICATION-CIRCUIT-TYPE CCSD Agency Code {JCAPS}
COMMUNICATION-CIRCUIT-TYPE	CCSD_PUR_USE_CODE	CCSD_PUR_USE_CODE		COMMUNICATION-CIRCUIT-TYPE CCSD Purpose Use Code {JCAPS}
COMMUNICATION-CIRCUIT-TYPE	CCSD_TYS_CODE	CCSD_TYS_CODE		COMMUNICATION-CIRCUIT-TYPE CCSD Type Service Code {JCAPS}
COMMUNICATION-CIRCUIT-TYPE	COM_CIR_TY_ID	COM_CIR_TY_ID		COMMUNICATION-CIRCUIT-TYPE Identifier {JCAPS}
COMMUNICATION-CIRCUIT-TYPE	COM_CIR_TY_RT	COM_CIR_TY_RT		COMMUNICATION-CIRCUIT-TYPE Data Rate {JCAPS}
COMMUNICATION-CIRCUIT-TYPE	COMMUNICATION-CIRCUIT-TYPE ABBREVIATED NAME	COM_CIR_TY_ABB_NM	THE ABBREVIATED FORM OF THE NAME OF A COMMUNICATION-CIRCUIT-TYPE.	COMMUNICATION-CIRCUIT-TYPE Abbreviated Name {JCAPS}
COMMUNICATION-CIRCUIT-TYPE	COMMUNICATION-CIRCUIT-TYPE CODE	COM_CIR_TY_CODE	THE CODE THAT DENOTES A KIND OF COMMUNICATION-CIRCUIT.	COMMUNICATION-CIRCUIT-TYPE Code {JCAPS}
COMMUNICATION-CIRCUIT-TYPE	COMMUNICATION-CIRCUIT-TYPE DESCRIPTION TEXT	COM_CIR_TY_D_TXT	THE TEXT THAT DESCRIBES A COMMUNICATION-CIRCUIT-TYPE.	COMMUNICATION-CIRCUIT-TYPE Description Text {JCAPS}
COMMUNICATION-CIRCUIT-TYPE	COMMUNICATION-CIRCUIT-TYPE NAME	COM_CIR_TY_NM	THE NAME OF A COMMUNICATION-CIRCUIT-TYPE.	COMMUNICATION-CIRCUIT-TYPE Name {JCAPS}
COMMUNICATION-CIRCUIT-TYPE	FROM_SY_TY_ID	SY_TY_ID		Source SYSTEM Identifier (FK) in COMMUNICATION-CIRCUIT-TYPE {JCAPS}

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
COMMUNICATION-CIRCUIT-TYPE	TO_SY_TY_ID	SY_TY_ID		Destination SYSTEM Identifier (FK) in COMMUNICATION-CIRCUIT-TYPE {JCAPS}
COMMUNICATION-LINK	COM_LNK_TY_CD	COM_LNK_TY_CD		COMMUNICATION-LINK-TYPE Code {JCAPS} associated with the COMMUNICATION-LINK-TYPE Identifier {JCAPS} (FK) in COMMUNICATION-LINK
COMMUNICATION-LINK	COMMUNICATION LINK TYPE IDENTIFIER	COMM_LNK_TY_ID		COMMUNICATION-LINK-TYPE Identifier {JCAPS} (FK)
COMMUNICATION-LINK	COMMUNICATION-LINK CHANNEL NUMBER QUANTITY	COM_LNK_CHN_QTY	THE NUMBER OF COMMUNICATION CHANNELS THAT CAN OPERATE ON A COMMUNICATION-LINK.	COMMUNICATION-LINK Channel Quantity {JCAPS}
COMMUNICATION-LINK	COMMUNICATION-LINK DESCRIPTION TEXT	COM_LNK_DSC_TX	THE TEXT THAT DESCRIBES A COMMUNICATION-LINK.	COMMUNICATION-LINK Description Text {JCAPS}
COMMUNICATION-LINK	COMMUNICATION-LINK GROUP DATA TRANSFER RATE	CLG_DATA_TRN_SF_RT	THE RATE AT WHICH DATA CAN BE TRANSFERRED ON A COMMUNICATION-LINK WHEN ALL CHANNELS ON THE COMMUNICATION-LINK ARE USED.	COMMUNICATION-LINK Group Data Transfer Rate {JCAPS}
COMMUNICATION-LINK	COMMUNICATION-LINK IDENTIFIER	COM_LNK_ID	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION-LINK.	COMMUNICATION-LINK Alternate Identifier {JCAPS}
COMMUNICATION-LINK	FROM_C2E_ID	C2E_ID		Source NODE Identifier (FK) in COMMUNICATION-LINK
COMMUNICATION-LINK	FROM_SYS_ID	SYS_ID		Source SYSTEM Identifier (FK) and Source NODE-SYSTEM Identifier (FK) in COMMUNICATION-LINK
COMMUNICATION-LINK	SLD	SLD		COMMUNICATION-LINK System Link Designator Identifier {JCAPS}
COMMUNICATION-LINK	TO_C2E_ID	C2E_ID		Destination NODE Identifier (FK) in COMMUNICATION-LINK
COMMUNICATION-LINK	TO_SYS_ID	SYS_ID		Destination SYSTEM Identifier (FK) and Destination NODE-SYSTEM Identifier (FK) in COMMUNICATION-LINK
COMMUNICATION-MEDIUM	COMMUNICATION-MEDIUM ABBREVIATED NAME	COM_MED_ABBR_NM	A SHORTENED FORM OF THE NAME OF A COMMUNICATION-MEDIUM.	COMMUNICATION-MEDIUM Abbreviated Name {JCAPS}
COMMUNICATION-MEDIUM	COMMUNICATION-MEDIUM IDENTIFIER	COM_MED_ID	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION-MEDIUM.	COMMUNICATION-MEDIUM Identifier
COMMUNICATION-MEDIUM	COMMUNICATION-MEDIUM NAME	COM_MED_NM	THE NAME OF A COMMUNICATION-MEDIUM.	COMMUNICATION-MEDIUM Name
COST MANAGEMENT	COST MANAGEMENT AMOUNT	CM_AMOUNT	THE DOLLAR AMOUNT ASSOCIATED WITH THE COST MANAGEMENT DATA	NODE-SYSTEM-COST-MANAGEMENT Amount
COST MANAGEMENT	COST MANAGEMENT IDENTIFIER	COST_MAN_ID		NODE-SYSTEM-COST-MANAGEMENT Identifier
COST MANAGEMENT	COST MANAGEMENT TYPE	CM_TYPE	THE TYPE OF COST MANAGEMENT DATA	NODE-SYSTEM-COST-MANAGEMENT Type Code

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
COST MANAGEMENT	COST MANAGEMENT YEAR	CM_YEAR	THE CALENDAR YEAR WHICH APPLIES TO THE COST MANAGEMENT DATA	NODE-SYSTEM-COST-MANAGEMENT Year Quantity
COST MANAGEMENT	SYS_ID			SYSTEM Identifier (FK) and NODE-SYSTEM Identifier (FK) in NODE-SYSTEM-COST-MANAGEMENT {JCAPS}
COUNTRY	COUNTRY ABBREVIATED NAME	CTRY_ABBRD_N_M	(14374) (A) THE ABBREVIATED FORM OF A COUNTRY NAME.	COUNTRY ABBREVIATED NAME
COUNTRY	COUNTRY CODE	CTRY_CD	(14392) (A) THE CODE THAT REPRESENTS A COUNTRY.	COUNTRY CODE
COUNTRY	COUNTRY NAME	CTRY_NM	(14397) (A) THE NAME OF A COUNTRY.	COUNTRY NAME
COUNTRY	COUNTRY OFFICIAL NAME	CTRY_OFF_NM	THE FORMAL APPROVED NAME OF A COUNTRY.	COUNTRY Official Name {JCAPS}
COUNTRY	COUNTRY POSTAL NAME	CTRY_PSTL_NM	(33864) (A) THE NAME OF A COUNTRY AS CONSTRAINED BY POSTAL ADDRESSING FORMATS.	COUNTRY POSTAL NAME
COUNTRY	COUNTRY SCOPE NOTE TEXT	CTRY_SCP_NT_TX	(17362) (A) FREE FORM TEXT EXPLAINING SOME GEOGRAPHICAL OR POLITICAL CIRCUMSTANCE ASSOCIATED WITH A COUNTRY.	COUNTRY Scope Note Text {JCAPS}
DATA-ITEM	DATA ITEM IDENTIFIER	MI_ID	THE IDENTIFIER THAT REPRESENTS A DATA ITEM	Data Item MATERIEL-ITEM Identifier (FK) in DATA-ITEM
DATA-ITEM	DATA-ITEM-TYPE CODE	DT_IT_TY_CD	THE CODE THAT DENOTES A KIND OF DATA-ITEM.	DATA-ITEM-TYPE Code associated with the DATA-ITEM-TYPE Identifier (FK) in DATA-ITEM
DATA-ITEM-TYPE	DATA-ITEM-TYPE CLASS CODE	DT_IT_TY_GLS_CD	THE CODE THAT DENOTES A SPECIFIC GROUPING OF A DATA-ITEM-TYPE.	DATA-ITEM-TYPE Class Code
DATA-ITEM-TYPE	DATA-ITEM-TYPE CODE	DT_IT_TY_CD	THE CODE THAT DENOTES A KIND OF DATA-ITEM.	DATA-ITEM-TYPE Code
DOCUMENT	BACKGROUND COLOR	BG_COLOR	THE PRODUCT'S BACKGROUND COLOR	N/A (implementation-specific)
DOCUMENT	BFILE_ID	BFILE_ID		N/A (implementation-specific)
DOCUMENT	CONTROL NUMBER	CONTROL_NUM	THE CONTROL NUMBER OF THE PRODUCT	N/A (implementation-specific)
DOCUMENT	DOC_ABVR_TTL_NM	DOC_ABVR_TTL_NM		DOCUMENT Abbreviated Title Name
DOCUMENT	DOC_VRSN_ID	DOC_VRSN_ID		DOCUMENT Version Identifier
DOCUMENT	DOCUMENT ABBREVIATED TITLE NAME	DOCUMENT_ABVR_TTL_NM	THE SHORTENED NAME OF A SPECIFIC DOCUMENT.	DOCUMENT Abbreviated Title Name
DOCUMENT	DOCUMENT APPROVAL DATE	DOC_APVL_DATE	(16157) (A) THE DATE THAT A DOCUMENT IS APPROVED.	DOCUMENT APPROVAL CALENDAR DATE
DOCUMENT	DOCUMENT CATEGORY CODE	DOC_CAT_CODE	A CODE WHICH REPRESENTS THE TYPE OF AFV2 PRODUCT	DOCUMENT CATEGORY CODE
DOCUMENT	DOCUMENT DESCRIPTION TEXT	DOC_DSC_TX	(18077) (D) THE TEXT THAT DESCRIBES A DOCUMENT.	DOCUMENT DESCRIPTION TEXT

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
DOCUMENT	DOCUMENT IDENTIFIER	DOC_ID	(9643) (A) THE IDENTIFIER THAT REPRESENTS A DOCUMENT (AFV2 PRODUCT).	DOCUMENT IDENTIFIER
DOCUMENT	DOCUMENT NAME	DOCUMENT_NAME	(7125) (A) THE NAME OF A DOCUMENT.	DOCUMENT NAME
DOCUMENT	DOCUMENT PUBLISHED DATE	DOC_PUB_DATE	(20830) (D) THE DATE A DOCUMENT IS PUBLISHED.	DOCUMENT PUBLISHED DATE
DOCUMENT	DOCUMENT SOURCE NAME	DOC_SRC_NM	THE NAME FOR THE ORIGINATOR OF A SPECIFIC DOCUMENT.	DOCUMENT Source Name
DOCUMENT	DOCUMENT SPECIFIC INITIALIZATION FILE NAME	DOC_FILE_NAME	THE NAME OF AN INITIALIZATION FILE FOR A DOCUMENT.	N/A (implementation-specific)
DOCUMENT	DOCUMENT SPECIFIC INITIALIZATION FILE PATH TEXT	DOC_SP_FP	THE TEXT THAT DESCRIBES THE PATH NEEDED TO ACCESS AN INITIALIZATION FILE.	N/A (implementation-specific)
DOCUMENT	LETUID	LETUID	THE IDENTIFIER THAT REPRESENTS THE RELATED DRAW INFORMATION FOR THIS PRODUCT	N/A (implementation-specific)
DOCUMENT	SECTION IDENTIFIER	SECTION_ID	THE SECTION IDENTIFIER OF THE PRODUCT	N/A (implementation-specific)
DOCUMENT	SUMMARY DESCRIPTION TEXT	SUMMARY_DTX	TEXT WHICH DESCRIBES THE PRODUCT	DOCUMENT Summary Description Text (JCAPS)
DOCUMENT MODEL OBJECT ASSOCIATION	DOCUMENT IDENTIFIER	DOC_ID	THE IDENTIFIER THAT REPRESENTS A DOCUMENT (PRODUCT)	DOCUMENT IDENTIFIER
DOCUMENT MODEL OBJECT ASSOCIATION	DOCUMENT MODEL OBJECT TYPE	DOC_MDL_TYPE	THE IDENTIFIER THAT REPRESENTS A MODEL OBJECT (AFV2 COMPONENT)	N/A (implementation-specific)
DOCUMENT MODEL OBJECT ASSOCIATION	DOCUMENT-MODEL OBJECT IDENTIFIER	DOC_MDL_ID	THE IDENTIFIER THAT REPRESENTS A DOCUMENT-MODEL OBJECT RELATIONSHIP	N/A (implementation-specific)
DOCUMENT MODEL OBJECT ASSOCIATION	INFORMATION EXCHANGE REQUIREMENT IDENTIFIER	IER_ID	THE IDENTIFIER THAT REPRESENTS AN INFORMATION EXCHANGE REQUIREMENT	Info Exch Req GUIDANCE Identifier (FK) in INFO-EXCH-REQ
DOCUMENT-IER ASSOCIATION	DOCUMENT IDENTIFIER	DOC_ID	THE IDENTIFIER THAT REPRESENTS A DOCUMENT (PRODUCT)	DOCUMENT IDENTIFIER (FK) in GUIDANCE-DOCUMENT
DOCUMENT-IER ASSOCIATION	INFORMATION EXCHANGE REQUIREMENT IDENTIFIER	IER_ID	THE IDENTIFIER THAT REPRESENTS AN INFORMATION EXCHANGE REQUIREMENT	GUIDANCE IDENTIFIER (FK) in GUIDANCE-DOCUMENT (INFO-EXCH-REQ is a subtype of INTEROPERABILITY-REQUIREMENT, which is a subtype of GUIDANCE)
ECHELON	ECHELON ABBREVIATION CODE	EHLN_ABRV_CD	THE CODE THAT DENOTES AN ABBREVIATION FOR AN ECHELON.	ORGANIZATION-TYPE ECHELON CODE (abbreviated names of domain values) in ORGANIZATION-TYPE
ECHELON	ECHELON DESCRIPTION TEXT	EHLN_DSC_TX	THE TEXT THAT DESCRIBES AN ECHELON.	ORGANIZATION-TYPE ECHELON CODE (definitions of domain values) in ORGANIZATION-TYPE
ECHELON	ECHELON IDENTIFIER	ECHELON_ID	THE IDENTIFIER THAT REPRESENTS AN ECHELON.	ORGANIZATION-TYPE ECHELON CODE (domain values) in ORGANIZATION-TYPE

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm. E	JCAPS Attribute Definition	Supported by IDA Proposed CADM View ORGANIZATION-TYPE ECHOLON CODE (names of domain values) in ORGANIZATION-TYPE EXCH-NEED-LINE-REQ Automation Priority Code
EXCHANGE-NEED-LINE-REQUIREMENT	EXCHANGE-NEED-LINE-REQUIREMENT AUTOMATION PRIORITY CODE	ENLR_AUTOM_PRTY_CD	THE CODE THAT REPRESENTS HOW OPERATIONALLY IMPORTANT IT IS FOR A SPECIFIC EXCHANGE-NEED-LINE-REQUIREMENT TO BE PARSED AND PROCESSED AUTOMATICALLY.	EXCH-NEED-LINE-REQ Availability Indicator Code
EXCHANGE-NEED-LINE-REQUIREMENT	EXCHANGE-NEED-LINE-REQUIREMENT AVAILABILITY INDICATOR CODE	ENLR_AVAL_IND_CD	THE CODE THAT REPRESENTS THE ASSESSMENT OF THE CURRENT CAPABILITY TO OBTAIN A PHYSICAL LINK FOR A SPECIFIC EXCHANGE-NEED-LINE-REQUIREMENT.	EXCH-NEED-LINE-REQ Constraint Text {JCAPS}
EXCHANGE-NEED-LINE-REQUIREMENT	EXCHANGE-NEED-LINE-REQUIREMENT CONSTRAINT TEXT	ENLR_CNSTR_TXT	THE CODE THAT REPRESENTS AN EVALUATION OF THE MISSION ESSENTIALITY OF A SPECIFIC EXCHANGE-NEED-LINE-REQUIREMENT.	EXCH-NEED-LINE-REQ Criticality Code
EXCHANGE-NEED-LINE-REQUIREMENT	EXCHANGE-NEED-LINE-REQUIREMENT CRITICALITY CODE	ENLR_CRIT_CD	THE TEXT THAT DESCRIBES LIMITATIONS ON THE USE OF AN EXCHANGE-NEED-LINE-REQUIREMENT.	EXCH-NEED-LINE-REQ Description Text {JCAPS}
EXCHANGE-NEED-LINE-REQUIREMENT	EXCHANGE-NEED-LINE-REQUIREMENT DESCRIPTION TEXT	EXCN_NDLN_REQ_DTX	THE TIME DISTRIBUTION OF OCCURRENCE OF USE OF AN EXCHANGE-NEED-LINE-REQUIREMENT.	EXCH-NEED-LINE-REQ Frequency Continuity Type Code
EXCHANGE-NEED-LINE-REQUIREMENT	EXCHANGE-NEED-LINE-REQUIREMENT FREQUENCY CONTINUITY TYPE CODE	ENLR_FCNTY_TY_CD	THE IDENTIFIER THAT REPRESENTS AN EXCHANGE-NEED-LINE-REQUIREMENT.	INTEROPERABILITY-REQUIREMENT Alternate Identifier {JCAPS} and INTEROPERABILITY-REQUIREMENT Alternate Identifier Source Name {JCAPS} (EXCHANGE-NEED-LINE-REQUIREMENT is a subtype of INTEROPERABILITY-REQUIREMENT)
EXCHANGE-NEED-LINE-REQUIREMENT	EXCHANGE-NEED-LINE-REQUIREMENT IDENTIFIER	EXCN_ND_LN_REQ_ID	THE CODE THAT SPECIFIES THE DEGREE OF PROTECTION FOR AN EXCHANGE-NEED-LINE-REQUIREMENT.	CAVEATED-SECURITY-CLASSIFICATION IDENTIFIER (FK) and SECURITY-CLASSIFICATION CODE (FK) in EXCHANGE-NEED-LINE-REQUIREMENT
EXCHANGE-NEED-LINE-REQUIREMENT	EXCHANGE-NEED-LINE-REQUIREMENT SECURITY LEVEL CODE	ENLR_SEC_LVL_CD	THE CODE THAT CHARACTERIZES HOW QUICKLY INFORMATION SHOULD BE TRANSMITTED USING AN EXCHANGE-NEED-LINE-REQUIREMENT.	EXCH-NEED-LINE-REQ Timeliness Code
EXCHANGE-NEED-LINE-REQUIREMENT	EXCHANGE-NEED-LINE-REQUIREMENT TIMELINESS CODE	ENLR_TMLY_CD	THE IDENTIFIER THAT REPRESENTS THE RECEIVING COMMAND AND CONTROL ELEMENT	Destination ORGANIZATION Identifier (FK) and Destination ORGANIZATION-TYPE Identifier (FK) in EXCHANGE-NEED-LINE-REQUIREMENT
EXCHANGE-NEED-LINE-REQUIREMENT	RECEIVING COMMAND-CONTROL-ELEMENT IDENTIFIER	C2E_ID		

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
EXCHANGE-NEED-LINE-REQUIREMENT	RECEIVING ORGANIZATION IDENTIFIER	ORG_ID	THE IDENTIFIER THAT REPRESENTS THE RECEIVING ORGANIZATION	Destination ORGANIZATION Identifier (FK) in EXCHANGE-NEED-LINE-REQUIREMENT
EXCHANGE-NEED-LINE-REQUIREMENT	SENDING COMMAND-CONTROL-ELEMENT IDENTIFIER	C2E_ID	THE IDENTIFIER THAT REPRESENTS THE SENDING COMMAND AND CONTROL ELEMENT	Source ORGANIZATION Identifier (FK) and Source ORGANIZATION-TYPE Identifier (FK) in EXCHANGE-NEED-LINE-REQUIREMENT
EXCHANGE-NEED-LINE-REQUIREMENT	SENDING ORGANIZATION IDENTIFIER	ORG_ID	THE IDENTIFIER THAT REPRESENTS THE SENDING ORGANIZATION	Source ORGANIZATION Identifier (FK) in EXCHANGE-NEED-LINE-REQUIREMENT
FUNCTION	FUNCTION DESCRIPTION TEXT	FUNC_D_TXT	THE TEXT THAT DESCRIBES A FUNCTION.	SYSTEM-FUNCTION Description Text {JCAPS}
FUNCTION	FUNCTION IDENTIFIER	FUNC_ID	THE IDENTIFIER THAT REPRESENTS A FUNCTION.	PROCESS-ACTIVITY IDENTIFIER (FK) in SYSTEM-FUNCTION
FUNCTION	FUNCTION NAME	FUNC_NM	THE NAME OF A FUNCTION.	PROCESS-ACTIVITY NAME (SYSTEM-FUNCTION is a subtype of PROCESS-ACTIVITY)
FUNCTION	FUNCTION TYPE CODE	FUNC_TY_CD	THE CODE THAT DENOTES A KIND OF FUNCTION.	SYSTEM-FUNCTION Type Code {JCAPS}
FUNCTION	FUNCTION VERSION IDENTIFIER	FUNC_VID	THE IDENTIFIER THAT REPRESENTS A SPECIFIC VERSION OF A FUNCTION.	PROCESS-ACTIVITY VERSION IDENTIFIER (SYSTEM-FUNCTION is a subtype of PROCESS-ACTIVITY)
FUNCTION	FUNCTIONAL-AREA IDENTIFIER	FNCT_AREA_ID	(20492) (A) THE IDENTIFIER THAT REPRESENTS A FUNCTIONAL-AREA.	FUNCTIONAL-AREA IDENTIFIER (FK) in SYSTEM-FUNCTION
FUNCTIONAL-AREA	FNCTNL_AR_DTX	FNCTNL_AR_DT X		FUNCTIONAL-AREA Description Text {JCAPS}
FUNCTIONAL-AREA	FUNCTIONAL-AREA DESCRIPTION TEXT	FNCTNL_AR_DS CR0_TX	THE TEXT THAT DESCRIBES A FUNCTIONAL-AREA.	FUNCTIONAL-AREA Description Text {JCAPS}
FUNCTIONAL-AREA	FUNCTIONAL-AREA IDENTIFIER	FNCT_AREA_ID	(20492) (A) THE IDENTIFIER THAT REPRESENTS A FUNCTIONAL-AREA.	FUNCTIONAL-AREA IDENTIFIER
FUNCTIONAL-AREA	FUNCTIONAL-AREA MISSION TEXT	FUNC_AR_MSN_TX	(20226) (A) THE TEXT OF THE PURPOSE AND OBJECTIVES OF A FUNCTIONAL-AREA.	FUNCTIONAL-AREA MISSION TEXT
FUNCTIONAL-AREA	FUNCTIONAL-AREA NAME	FUNC_AR_NM	(20225) (A) THE NAME OF A FUNCTIONAL-AREA.	FUNCTIONAL-AREA NAME
FUNCTIONAL-AREA	FUNCTIONAL-AREA STEWARD NAME	FNCT_AR_STWD_NM	(26755) (A) THE NAME OF THE MANAGER OF A FUNCTIONAL-AREA.	FUNCTIONAL-AREA STEWARD NAME
FUNCTIONAL-AREA	FUNCTIONAL-AREA TYPE CODE	FUNC_AR_TY_C D	THE CODE THAT REPRESENTS A KIND OF FUNCTIONAL-AREA.	FUNCTIONAL-AREA Type Code {JCAPS}
FUNCTIONAL-AREA	ORGANIZATION IDENTIFIER	ORG_ID	(7875) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	Proponent ORGANIZATION Identifier (FK) in FUNCTIONAL-AREA
INFORMATION-EXCHANGE-REQUIREMENT	COMMUNICATION-MEDIUM IDENTIFIER	COM_MED_ID	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION-MEDIUM.	COMMUNICATION-MEDIUM Identifier (FK) in INFO-EXCH-REQ

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
INFORMATION-EXCHANGE-REQUIREMENT	FNCT_AREA_ID			FUNCTIONAL-AREA IDENTIFIER (FK) in INTEROPERABILITY-REQUIREMENT (INFORMATION-REQUIREMENT is a subtype of INTEROPERABILITY-REQUIREMENT)
INFORMATION-EXCHANGE-REQUIREMENT	FREQUENCY BAND IDENTIFIER	FREQ_BAND_ID	THE IDENTIFIER THAT REPRESENTS THE FREQUENCY BAND ASSOCIATED WITH THE IER	Derived from characteristics of the MATERIEL-ITEM cited by the Primary Transmission MATERIEL-ITEM Identifier (FK) in INFO-EXCH-REQ
INFORMATION-EXCHANGE-REQUIREMENT	ICOM NAME	ICOM_NAME	THE NAME OF THE ACTIVITY INFORMATION (INPUT-CONTROL-OUTPUT-MECHANISM) ASSOCIATED WITH THE IER	INFO-ELEMENT NAME associated with the INFO-ELEMENT IDENTIFIER (FK) in INFORMATION-REQUIREMENT (INFO-ELEMENT was formerly named ICOM)
INFORMATION-EXCHANGE-REQUIREMENT	IER_TMLY_CD			INFO-REQ Timeliness Code
INFORMATION-EXCHANGE-REQUIREMENT	IER_TMLY_CD2	IER_TMLY_CD		INFO-REQ Timeliness Code
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT ACCURACY DESCRIPTION TEXT	IER_ACC_DTX	THE TEXT THAT SUMMARIZES THE DEGREE OF CORRECTNESS OF A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	INFO-REQ Accuracy Description Text
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT AVAILABILITY INDICATOR CODE	IER_AVAL_IND_CD	THE CODE THAT REPRESENTS THE ASSESSMENT OF THE CURRENT CAPABILITY TO OBTAIN THE INFORMATION FOR A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	INFO-REQ Availability Indicator Code
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT CAPABILITY TEXT	IER_CAPABILITY_TX	THE TEXT THAT SPECIFIES WHAT AN INFORMATION-EXCHANGE-REQUIREMENT IS ABLE TO ACCOMPLISH.	GUIDANCE SYNOPSIS TEXT associated with the Info Req GUIDANCE Identifier (FK) in INFORMATION-REQUIREMENT
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT CONTENT DESCRIPTION TEXT	IER_CNTN_DTX	THE TEXT THAT AMPLIFIES THE DESIGNATION OF THE DATA INCORPORATED INTO A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	INFO-REQ Content Description Text
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT IDENTIFIER	IER_ID	THE IDENTIFIER THAT REPRESENTS AN INFORMATION-EXCHANGE-REQUIREMENT.	INTEROPERABILITY-REQUIREMENT Alternate Identifier (JCAPS) and INTEROPERABILITY-REQUIREMENT Alternate Identifier Source Name (JCAPS) (INFORMATION-REQUIREMENT is a subtype of INTEROPERABILITY-REQUIREMENT)
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT INFORMATION CLASS CODE	IER_INF_CLS_CODE	THE CODE THAT DENOTES THE TYPE OF DATA FOR A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	DATA-ITEM-TYPE Code associated with the DATA-ITEM-TYPE Identifier (FK) in INFORMATION-REQUIREMENT-DATA-ITEM-TYPE for an INFO-REQ GUIDANCE Identifier (FK) and thus a specific INFORMATION-REQUIREMENT

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT INFORMATION ELEMENT MULTIPLE QUANTITY	IER_INF_ELMT_QY	THE NUMBER OF TIMES A SPECIFIC INFORMATION ELEMENT IS SENT AS A RESULT OF AN INFORMATION-EXCHANGE-REQUIREMENT.	INFO-REQ Exchange Frequency Text {JCAPS}
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT INTEROPERABILITY LEVEL CODE	IER_INTROP_LV_L_CD	THE CODE THAT DENOTES THE CLASS OF TECHNICAL MEANS INTENDED TO BE USED FOR SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	INFO-REQ Interoperability Level Code
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT MEDIUM TEXT	IER_MEDIUM_TX	THE TEXT THAT SPECIFIES THE TYPE OF MEDIUM FOR AN INFORMATION-EXCHANGE-REQUIREMENT.	COMMUNICATION-MEDIUM Name and COMMUNICATION-MEDIUM Category Code (definitions of domain values) associated with the COMMUNICATION-MEDIUM Identifier (FK) in INFO-EXCH-REQ
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT PURPOSE DESCRIPTION TEXT	IER_PRPS_DTX	THE TEXT THAT CHARACTERIZES THE OBJECTIVE OF A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	INFO-REQ Purpose Description Text
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT QUALITY CODE	IER_QUAL_CD	THE CODE THAT REPRESENTS THE LEVEL OF CLARITY OF A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	INFO-REQ Quality Code
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT RANGE TEXT	IER_RNG_TX	THE DISTANCE OVER WHICH AN INFORMATION-EXCHANGE-REQUIREMENT IS SENT AND RECEIVED.	CAPABILITY DESCRIPTION TEXT for the CAPABILITY IDENTIFIER (FK) for a specific REQUIRED-INTEROPERABILITY-CAPABILITY
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT RANGE UNITS TEXT	IER_RNG_UN_TX	THE TEXT THAT DESCRIBES THE UNITS USED TO EXPRESS THE RANGE OF AN INFORMATION-EXCHANGE-REQUIREMENT.	CAPABILITY MEASUREMENT UNIT CODE for the CAPABILITY IDENTIFIER (FK) for a specific REQUIRED-INTEROPERABILITY-CAPABILITY
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT SECURITY LEVEL CODE	IER_SEC_LVL_CD	THE CODE THAT DESIGNATES THE GENERAL CLASS OF RESTRICTION FOR A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	CAVEATED-SECURITY-CLASSIFICATION IDENTIFIER (FK) and SECURITY-CLASSIFICATION CODE (FK) in INFORMATION-REQUIREMENT
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT SUBSCRIPTION TYPE TEXT	IER_SBSCN_TY_TX	THE TEXT THAT SUMMARIZES THE CLASS OF CONTROL ASSOCIATION WITH DISSEMINATING A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	INFO-REQ Subscription Type Text
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT TRANSACTION TYPE TEXT	IER_TRNSACT_TY_TX	THE TEXT THAT SUMMARIZES THE INTENDED METHOD OF TRANSMISSION FOR A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	INFO-REQ Transaction Type Text

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
INFORMATION-EXCHANGE-REQUIREMENT	INFORMATION-EXCHANGE-REQUIREMENT VOLUME INDICATOR CODE	IER_VL_IND_CD	THE CODE THAT REPRESENTS AN ESTIMATE OF THE AMOUNT OF RELEVANT INFORMATION THAT IS PROVIDED FOR A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	INFO-REQ Volume Indicator Code
INFORMATION-EXCHANGE-REQUIREMENT	MESSAGE FREQUENCY OF EXCHANGE	IE_FREQ_OF_EX_CN	THE FREQUENCY OF EXCHANGE OF THE ASSOCIATED MESSAGE [AUTO POPULATED VIA TRIGGER]	INFO-REQ Exchange Frequency Text (JCAPS)
INFORMATION-EXCHANGE-REQUIREMENT	MESSAGE IDENTIFIER	MESSAGE_ID	THE IDENTIFIER THAT REPRESENTS THE MESSAGE ASSOCIATED WITH THE IER	INFO-ELEMENT IDENTIFIER
INFORMATION-EXCHANGE-REQUIREMENT	MESSAGE MEDIA TEXT	IE_MSG_MEDIA_TX	THE MEDIA TEXT OF THE ASSOCIATED MESSAGE [AUTO POPULATED VIA TRIGGER]	AGREEMENT TEXT associated with the Standard AGREEMENT Identifier (FK) in MESSAGE-STANDARD
INFORMATION-EXCHANGE-REQUIREMENT	MESSAGE NAME	IE_MESSAGE_NAME	THE NAME OF THE ASSOCIATED MESSAGE [AUTO POPULATED VIA TRIGGER]	INFO-ELEMENT NAME
INFORMATION-EXCHANGE-REQUIREMENT	MESSAGE PRIORITY	IE_PRIORITY	THE PRIORITY OF THE ASSOCIATED MESSAGE [AUTO POPULATED VIA TRIGGER]	INFO-EXCH-REQ Preference Code and INFO-EXCH-REQ Precedence Code
INFORMATION-EXCHANGE-REQUIREMENT	MESSAGE THROUGHPUT	IE_THROUGHPUT	THE THROUGHPUT OF THE ASSOCIATED MESSAGE [AUTO POPULATED VIA TRIGGER]	REQUIRED-INTEROPERABILITY-CAPABILITY Measurement Unit Quantity for a throughput instance of CAPABILITY
INFORMATION-EXCHANGE-REQUIREMENT	MESSAGE THROUGHPUT UNITS	IE_THRPUT_UNITS	THE THROUGHPUT UNITS OF THE ASSOCIATED MESSAGE [AUTO POPULATED VIA TRIGGER]	CAPABILITY MEASUREMENT UNIT CODE for a throughput instance of CAPABILITY associated to an INFO-REQ or INFO-EXCH-REQ through REQUIRED-INTEROPERABILITY-CAPABILITY (both INFO-REQ and INFO-EXCH-REQ are subtypes of INTEROPERABILITY-REQUIREMENT, which is a parent entity for REQUIRED-INTEROPERABILITY-CAPABILITY)
INFORMATION-EXCHANGE-REQUIREMENT	MESSAGE TIMELINESS	IE_TIMELINESS	THE TIMELINESS OF THE ASSOCIATED MESSAGE [AUTO POPULATED VIA TRIGGER]	INFO-REQ Timeliness Code
INFORMATION-EXCHANGE-REQUIREMENT	MSN_AR_TYP_CD	[not in physical view of JCAPS 2.1]		N/A (in JCAPS logical view but not in JCAPS physical view for the JCAPS 2.1 Physical Schema)
INFORMATION-EXCHANGE-REQUIREMENT	RECEIVING ACTIVITY IDENTIFIER	PRCS_ACTY_ID	THE IDENTIFIER THAT REPRESENTS THE RECEIVING ACTIVITY	Destination PROCESS-ACTIVITY Identifier (FK) in INFO-EXCH-REQ
INFORMATION-EXCHANGE-REQUIREMENT	RECEIVING ACTIVITY NAME	PRCS_ACTY_NM_2	THE NAME OF THE RECEIVING ACTIVITY [AUTO POPULATED VIA TRIGGER]	PROCESS-ACTIVITY NAME associated with the Destination PROCESS-ACTIVITY Identifier (FK) in INFO-EXCH-REQ
INFORMATION-EXCHANGE-REQUIREMENT	RECEIVING C2E IDENTIFIER	C2E_ID	THE IDENTIFIER THAT REPRESENTS THE RECEIVING COMMAND AND CONTROL ELEMENT	Destination (Node 1) NODE Identifier (FK) in INFO-EXCH-REQ

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
INFORMATION-EXCHANGE-REQUIREMENT	RECEIVING C2E NAME	C2E_NM_2	THE NAME OF THE RECEIVING COMMAND AND CONTROL ELEMENT [AUTO POPULATED VIA TRIGGER]	Node Name associated with the Destination (Node 1) NODE Identifier (FK) in INFO-EXCH-REQ
INFORMATION-EXCHANGE-REQUIREMENT	RECEIVING ORGANIZATION IDENTIFIER	ORG_ID	THE IDENTIFIER THAT REPRESENTS THE RECEIVING ORGANIZATION	Destination ORGANIZATION Identifier (FK) in INFO-EXCH-REQ
INFORMATION-EXCHANGE-REQUIREMENT	RECEIVING ORGANIZATION NAME	ORG_NM_2	THE NAME OF THE RECEIVING ORGANIZATION [AUTO POPULATED VIA TRIGGER]	ORGANIZATION NAME associated with the Destination ORGANIZATION Identifier (FK) in INFO-EXCH-REQ
INFORMATION-EXCHANGE-REQUIREMENT	RECEIVING UJTL HIERARCHY NUMBER	NUM_ID_2	THE UJTL HIERARCHY NUMBER ASSOCIATED WITH THE RECEIVING ACTIVITY	TASK Hierarchy Number Identifier associated with the Destination TASK Identifier (FK) in INFO-EXCH-REQ
INFORMATION-EXCHANGE-REQUIREMENT	RECEIVING UJTL WAR CODE	WAR_CD_2	THE UJTL WAR CODE ASSOCIATED WITH THE RECEIVING ACTIVITY	TASK Command Level Code associated with the Destination TASK Identifier (FK) in INFO-EXCH-REQ
INFORMATION-EXCHANGE-REQUIREMENT	SCENARIO IDENTIFIER	SCENARIO_ID	THE IDENTIFIER THAT REPRESENTS THE SCENARIO ASSOCIATED WITH THE IER	OPERATIONAL-SCENARIO Identifier (FK) in INTEROPERABILITY-REQUIREMENT (INFO-EXCH-REQ is a subtype of INTEROPERABILITY-REQUIREMENT)
INFORMATION-EXCHANGE-REQUIREMENT	SENDING ACTIVITY IDENTIFIER	PRCS_ACTY_ID	THE IDENTIFIER THAT REPRESENTS THE SENDING ACTIVITY	Source PROCESS-ACTIVITY Identifier (FK) in INFO-EXCH-REQ
INFORMATION-EXCHANGE-REQUIREMENT	SENDING ACTIVITY NAME	PRCS_ACTY_NM_1	THE NAME OF THE SENDING ACTIVITY [AUTO POPULATED VIA TRIGGER]	PROCESS-ACTIVITY NAME associated with the Source PROCESS-ACTIVITY Identifier (FK) in INFO-EXCH-REQ
INFORMATION-EXCHANGE-REQUIREMENT	SENDING C2E IDENTIFIER	C2E_ID	THE IDENTIFIER THAT REPRESENTS THE SENDING COMMAND & CONTROL ELEMENT	Source (Node 1) NODE Identifier (FK) in INFO-EXCH-REQ
INFORMATION-EXCHANGE-REQUIREMENT	SENDING C2E NAME	C2E_NM_1	THE NAME OF THE SENDING COMMAND AND CONTROL ELEMENT [AUTO POPULATED VIA TRIGGER]	Node Name associated with the Source (Node 1) NODE Identifier (FK) in INFO-EXCH-REQ
INFORMATION-EXCHANGE-REQUIREMENT	SENDING ORGANIZATION IDENTIFIER	ORG_ID	THE IDENTIFIER THAT REPRESENTS THE SENDING ORGANIZATION	Source ORGANIZATION Identifier (FK) in INFO-EXCH-REQ
INFORMATION-EXCHANGE-REQUIREMENT	SENDING ORGANIZATION NAME	ORG_NM_1	THE NAME OF THE SENDING ORGANIZATION [AUTO POPULATED VIA TRIGGER]	ORGANIZATION NAME associated with the Source ORGANIZATION Identifier (FK) in INFO-EXCH-REQ
INFORMATION-EXCHANGE-REQUIREMENT	SENDING UJTL HIERARCHY NUMBER	NUM_ID_1	THE UJTL HIERARCHY NUMBER ASSOCIATED WITH THE SENDING ACTIVITY	TASK Hierarchy Number Identifier associated with the Source TASK Identifier (FK) in INFO-EXCH-REQ
INFORMATION-EXCHANGE-REQUIREMENT	SENDING UJTL WAR CODE	WAR_CD_1	THE UJTL WAR CODE ASSOCIATED WITH THE SENDING ACTIVITY	TASK Command Level Code associated with the Source TASK Identifier (FK) in INFO-EXCH-REQ

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
INFORMATION-EXCHANGE-REQUIREMENT	SEQ_NO_ID			OPERATIONAL-MISSION-THREAD-ELEMENT Sequence Number Identifier associated with an Info Exch Req GUIDANCE Identifier (FK) in OPERATIONAL-MISSION-THREAD-ELEMENT
INFORMATION-EXCHANGE-REQUIREMENT	SEQ_NO_ID2	SEQ_NO_ID		OPERATIONAL-MISSION-THREAD-ELEMENT Sequence Number Identifier associated with an Info Exch Req GUIDANCE Identifier (FK) in OPERATIONAL-MISSION-THREAD-ELEMENT
INTERFACE	INTERFACE DESCRIPTION TEXT	INTF_DESC_TXT	THE TEXT WHICH DESCRIBES THE INTERFACE	INTERFACE Description Text {JCAPS}
INTERFACE	INTERFACE IDENTIFIER	INTF_ID	THE IDENTIFIER THAT REPRESENTS AN INTERFACE	INTERFACE Identifier {JCAPS}
INTERFACE	INTERFACE NAME	INTF_NAME	THE NAME OF THE INTERFACE	INTERFACE Name {JCAPS}
INTERFACE	INTERFACE TYPE IDENTIFIER	INTF_TY_ID	THE IDENTIFIER THAT REPRESENTS THE BASE TYPE OF INTERFACE FROM WHICH THIS INTERFACE IS DERIVED	INTERFACE-TYPE Identifier {JCAPS} (FK) in INTERFACE
INTERFACE	RECEIVING C2E IDENTIFIER	C2E_ID	THE IDENTIFIER THAT REPRESENTS THE RECEIVING COMMAND CONTROL ELEMENT	Receiving NODE Identifier (FK) in INTERFACE
INTERFACE	RECEIVING SYSTEM IDENTIFIER	SYS_ID	THE IDENTIFIER THAT REPRESENTS THE RECEIVING SYSTEM	Receiving SYSTEM Identifier (FK) and Receiving NODE-SYSTEM Identifier (FK) in INTERFACE
INTERFACE	SENDING C2E IDENTIFIER	C2E_ID	THE IDENTIFIER THAT REPRESENTS THE SENDING COMMAND CONTROL ELEMENT	Sending NODE Identifier (FK) in INTERFACE
INTERFACE	SENDING SYSTEM IDENTIFIER	SYS_ID	THE IDENTIFIER THAT REPRESENTS THE SENDING SYSTEM	Sending SYSTEM Identifier (FK) and Sending NODE- SYSTEM Identifier (FK) in INTERFACE
INTERFACE TYPE	COMMUNICATION CIRCUIT TYPE IDENTIFIER	COM_CIR_TY_ID	THE IDENTIFIER THAT REPRESENTS THE RELATED COMMUNICATION CIRCUIT	COMMUNICATION-CIRCUIT-TYPE Identifier {JCAPS} (FK) in INTERFACE-TYPE {JCAPS}
INTERFACE TYPE	COMMUNICATION LINK TYPE IDENTIFIER	COMM_LNK_TY_ID	THE IDENTIFIER THAT REPRESENTS THE RELATED COMMUNICATION LINK	COMMUNICATION-LINK-TYPE Identifier {JCAPS} (FK) in INTERFACE-TYPE {JCAPS}
INTERFACE TYPE	COMMUNICATION-CIRCUIT-TYPE CODE	COM_CIR_TY_CD	THE CODE THAT DENOTES A KIND OF COMMUNICATION-CIRCUIT.	COMMUNICATION-CIRCUIT-TYPE Code {JCAPS} (FK) in INTERFACE-TYPE {JCAPS}
INTERFACE TYPE	INTERFACE TYPE AUTO CODE		CODE USED BY JCAPS FOR AUTO ROUTING	INTERFACE-TYPE Auto Code {JCAPS}
INTERFACE TYPE	INTERFACE TYPE DESCRIPTION TEXT	INTF_TY_DESC_TXT	THE TEXT WHICH DESCRIBES THE INTERFACE TYPE	INTERFACE-TYPE Description Text {JCAPS}
INTERFACE TYPE	INTERFACE TYPE IDENTIFIER	INTF_TY_ID	THE IDENTIFIER THAT REPRESENTS A GENERIC TYPE OF INTERFACE	INTERFACE-TYPE Identifier {JCAPS}
INTERFACE TYPE	INTERFACE TYPE NAME	INTF_TY_NAME	THE NAME OF THE INTERFACE TYPE	INTERFACE-TYPE Name {JCAPS}
INTERFACE TYPE	INTF_TY_AUTO_CD	INTF_TY_AUTO_CD		INTERFACE-TYPE Auto Code {JCAPS}

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
INTERFACE TYPE	Y2K COMPLIANCE LEVEL CODE	Y2K_COMP_LVL_CD	THE CODE WHICH REPRESENTS THE LEVEL OF Y2K COMPLIANCE THIS INTERFACE MEETS	INTERFACE-TYPE Year 2000 Compliance Level Code {JCAPS}
INTERFACE-IER ASSOCIATION	IER IDENTIFIER	IER_ID	THE IDENTIFIER THAT REPRESENTS AN INFORMATION EXCHANGE REQUIREMENT	Info Exch Req GUIDANCE Identifier (FK) in INTERFACE-IER-ASSOCIATION {JCAPS}
INTERFACE-IER ASSOCIATION	INTERFACE IDENTIFIER	INTF_ID	THE IDENTIFIER THAT REPRESENTS AN INTERFACE	INTERFACE Identifier {JCAPS} (FK) in INTERFACE-IER-ASSOCIATION {JCAPS}
INTERFACE-IER ASSOCIATION	INTERFACE IER ASSOCIATION IDENTIFIER	INTF_IER_ASN_ID	THE IDENTIFIER THAT REPRESENTS AN INFORMATION EXCHANGE REQUIREMENT - INTERFACE RELATIONSHIP	INTERFACE-IER-ASSOCIATION Identifier {JCAPS}
LINK-IER ASSOCIATION	COMMUNICATION LINK IDENTIFIER	COM_LNK_ID	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION LINK	COMMUNICATION-LINK Alternate Identifier {JCAPS} (FK) in COMMUNICATION-LINK-IER-ASSOCIATION
LINK-IER ASSOCIATION	IER IDENTIFIER	IER_ID	THE IDENTIFIER THAT REPRESENTS AN INFORMATION EXCHANGE REQUIREMENT	Info Exch Req GUIDANCE Identifier (FK) in COMMUNICATION-LINK-IER-ASSOCIATION
LINK-IER ASSOCIATION	LINK IER ASSOCIATION IDENTIFIER	LINK_IER_ASN_ID	THE IDENTIFIER THAT REPRESENTS THE RELATIONSHIP BETWEEN A COMMUNICATION LINK AND AN INFORMATION EXCHANGE REQUIREMENT	COMMUNICATION-LINK-IER-ASSOCIATION Identifier {JCAPS}
MESSAGE	CORE TASK	CORE_TASK	THE CORE TASK ASSOCIATED WITH THE MESSAGE	Source TASK Identifier (FK) and Destination TASK Identifier (FK) in INFO-EXCH-REQ
MESSAGE	FREQUENCY OF EXCHANGE	FREQ_OF_EXCN	THE FREQUENCY AT WHICH THE MESSAGE IS TO BE SENT	INFO-REQ Exchange Frequency Text {JCAPS}
MESSAGE	MESSAGE AVAILABILITY INDICATOR CODE	MSG_VL_IND_CD	THE CODE THAT REPRESENTS THE ASSESSMENT OF THE CURRENT CAPABILITY TO OBTAIN THE INFORMATION FOR A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT.	INFO-REQ Availability Indicator Code
MESSAGE	MESSAGE DESCRIPTION TEXT	MESSAGE_DSC_TX	THE TEXT THAT DESCRIBES A MESSAGE.	INFO-REQ Description Text {JCAPS}
MESSAGE	MESSAGE IDENTIFIER	MESSAGE_ID	THE IDENTIFIER THAT REPRESENTS A MESSAGE	INTEROPERABILITY-REQUIREMENT Alternate Identifier {JCAPS} and INTEROPERABILITY-REQUIREMENT Alternate Identifier Source Name {JCAPS} (INFORMATION-REQUIREMENT is a subtype of INTEROPERABILITY-REQUIREMENT)
MESSAGE	MESSAGE MEDIA TEXT	MSG_MEDIA_TX	THE TEXT OF THE MESSAGE	AGREEMENT TEXT associated with the Standard AGREEMENT Identifier (FK) in MESSAGE-STANDARD
MESSAGE	MESSAGE NAME	MESSAGE_NM	THE NAME OF A MESSAGE.	GUIDANCE NAME (INFORMATION-REQUIREMENT is a subtype of INTEROPERABILITY-REQUIREMENT, which is a subtype of GUIDANCE)

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
MESSAGE	MESSAGE_NAME	MESSAGE_NAME		GUIDANCE NAME (INFORMATION-REQUIREMENT is a subtype of INTEROPERABILITY-REQUIREMENT, which is a subtype of GUIDANCE)
MESSAGE	MSG_DSC_TX	MSG_DSC_TX		INFO-REQ Description Text {JCAPS}
MESSAGE	PERISHABLE_FLAG	PERISH_FLAG	A BOOLEAN WHICH DENOTES WHETHER OR NOT THE MESSAGE INFORMATION IS PERISHABLE	INFO-EXCH-REQ Perishability Code
MESSAGE	PRIORITY	PRIORITY	THE PRIORITY OF THE MESSAGE INFORMATION	INFO-EXCH-REQ Preference Code and INFO-EXCH-REQ Precedence Code
MESSAGE	SECURITY	SECURITY	THE SECURITY CLASSIFICATION OF THE MESSAGE INFORMATION	CAVEATED-SECURITY-CLASSIFICATION IDENTIFIER (FK) and SECURITY-CLASSIFICATION CODE (FK) in INFORMATION-REQUIREMENT
MESSAGE	THROUGHPUT	THROUGHPUT	THE NUMERICAL THROUGHPUT OR DATA RATE OF THE INFORMATION FLOW	REQUIRED-INTEROPERABILITY-CAPABILITY Measurement Unit Quantity for a throughput instance of CAPABILITY
MESSAGE	THROUGHPUT_UNITS	THRPUT_UNITS	THE UNIT SPECIFIER OF THE THROUGHPUT	CAPABILITY MEASUREMENT UNIT CODE for a throughput instance of CAPABILITY associated to an INFO-REQ or INFO-EXCH-REQ through REQUIRED-INTEROPERABILITY-CAPABILITY (both INFO-REQ and INFO-EXCH-REQ are subtypes of INTEROPERABILITY-REQUIREMENT, which is a parent entity for REQUIRED-INTEROPERABILITY-CAPABILITY)
MESSAGE	TIMELINESS	TIMELINESS	THE RELATIVITY TO REAL TIME AT WHICH THE INFORMATION EXCHANGE IS OCCURRING	INFO-REQ Timeliness Code
MISSION-AREA	MISSION-AREA DESCRIPTION TEXT	MSN_AR_DSCR PTN_TX	(16076) (A) THE TEXT THAT DESCRIBES A MISSION-AREA.	MISSION-AREA DESCRIPTION TEXT
MISSION-AREA	MISSION-AREA NAME	MSN_AR_NM	(16077) (A) THE NAME OF A MISSION-AREA.	MISSION-AREA NAME
MISSION-AREA	MISSION-AREA TYPE CODE	MSN_AR_TYP_C D	(16078) (A) THE CODE THAT DENOTES A CLASS OF MISSION-AREA.	MISSION-AREA TYPE CODE
MISSION-AREA-FUNCTIONAL-AREA	FUNCTIONAL-AREA IDENTIFIER	FNCT_AREA_ID	(20492) (A) THE IDENTIFIER THAT REPRESENTS A FUNCTIONAL-AREA.	FUNCTIONAL-AREA IDENTIFIER (FK) in MISSION-AREA-FUNCTIONAL-AREA
MISSION-AREA-FUNCTIONAL-AREA	MISSION-AREA TYPE CODE	MSN_AR_TYP_C D	(16078) (A) THE CODE THAT DENOTES A CLASS OF MISSION-AREA.	MISSION-AREA TYPE CODE (FK) in MISSION-AREA-FUNCTIONAL-AREA
MISSION-AREA-FUNCTIONAL-AREA	MISSION-AREA-FUNCTIONAL-AREA DESCRIPTION TEXT	MS_AR_F_AR_D TX	THE TEXT THAT DESCRIBES A MISSION-AREA-FUNCTIONAL-AREA.	MISSION-AREA-FUNCTIONAL-AREA Description Text {JCAPS}
MISSION-AREA-FUNCTIONAL-AREA	MISSION-AREA-FUNCTIONAL-AREA ROLE CODE	MS_AR_F_AR_R L_CD	THE CODE THAT DESIGNATES THE SPECIFIC WAY IN WHICH A FUNCTIONAL-AREA IS CITED FOR AN INSTANCE OF MISSION-AREA.	MISSION-AREA-FUNCTIONAL-AREA Role Code

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
ORGANIZATION	COUNTRY CODE	CTRY_CD	A CODE WHICH DENOTES THE HOME COUNTRY OF THE ORGANIZATION	COUNTRY CODE (FK) in ORGANIZATION-TYPE for the ORGANIZATION-TYPE IDENTIFIER (FK) in ORGANIZATION
ORGANIZATION	ECHELON IDENTIFIER	ECHELON_ID	THE IDENTIFIER THAT REPRESENTS AN ECHELON	ORGANIZATION-TYPE ECHELON CODE (FK) in ORGANIZATION-TYPE for the ORGANIZATION-TYPE IDENTIFIER (FK) in ORGANIZATION
ORGANIZATION	ECHELON LEVEL CODE	EHLN_LVL_CD	A CODE WHICH DENOTES THE LEVEL OF THE ECHELON OF THE ORGANIZATION	ORGANIZATION-TYPE ECHELON CODE (FK) in ORGANIZATION-TYPE for the ORGANIZATION-TYPE IDENTIFIER (FK) in ORGANIZATION
ORGANIZATION	ORGANIZATION ADDRESS TEXT	ORG_ADDRESS_TEXT	THE MAILING ADDRESS OF THE ORGANIZATION	ORGANIZATION Address Text {JCAPS}
ORGANIZATION	ORGANIZATION ADMINISTRATIVE LOSS RATE	ORG_ADMN_LOS_RT	(29204) (A) THE ACTUAL RATE OF PERSONNEL ATTRITION APPLICABLE TO AN ORGANIZATION.	ORGANIZATION ADMINISTRATIVE LOSS RATE
ORGANIZATION	ORGANIZATION ARM TYPE CODE	ORG_ARM_TY_CD	THE CODE WHICH DENOTES THE ARM TYPE OF THE ORGANIZATION	ORGANIZATION-TYPE ARM CODE (FK) in ORGANIZATION-TYPE for the ORGANIZATION-TYPE IDENTIFIER (FK) in ORGANIZATION
ORGANIZATION	ORGANIZATION CATEGORY CODE	ORG_CAT_CD	(23495) (A) THE CODE THAT REPRESENTS A CLASSIFICATION OF AN ORGANIZATION.	ORGANIZATION CATEGORY CODE
ORGANIZATION	ORGANIZATION CLASSIFICATION CODE	ORG_CLSN_CD	(17043) (A) THE CODE THAT REPRESENTS A CATEGORIZATION OF AN ORGANIZATION.	ORGANIZATION CLASSIFICATION CODE
ORGANIZATION	ORGANIZATION CURRENT ABBREVIATED NAME	ORG_CUR_ABV_R_NM	A SHORTENED FORM OF THE CURRENT NAME OF AN ORGANIZATION.	ORGANIZATION Current Abbreviated Name {JCAPS}
ORGANIZATION	ORGANIZATION CURRENT NAME	ORG_CUR_NM	THE NAME OF THE ORGANIZATION AT THE PRESENT TIME.	ORGANIZATION Current Name {JCAPS}
ORGANIZATION	ORGANIZATION DESCRIPTION TEXT	ORG_DSC_TX	(4882) (A) THE TEXT DESCRIBING AN ORGANIZATION.	ORGANIZATION DESCRIPTION TEXT
ORGANIZATION	ORGANIZATION DURATION TYPE CODE	ORG_DUR_TY_CD	(23496) (A) THE CODE THAT REPRESENTS A SPECIFIC KIND OF TIME FRAME ASSOCIATED WITH AN ORGANIZATION.	ORGANIZATION DURATION TYPE CODE
ORGANIZATION	ORGANIZATION ENTERPRISE TYPE CODE	ORG_ENTRPZ_TY_CD	(32511) (A) THE CODE THAT DENOTES THE KIND OF ENTERPRISE UNDERTAKEN BY AN ORGANIZATION.	ORGANIZATION ENTERPRISE TYPE CODE
ORGANIZATION	ORGANIZATION FRIEND FOE CODE	ORG_FR_FOE_CD	(11228) (A) THE CODE THAT DENOTES WHETHER A SPECIFIC ORGANIZATION IS FRIENDLY.	ORGANIZATION FRIEND FOE CODE
ORGANIZATION	ORGANIZATION IDENTIFIER	ORG_ID	(7875) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	ORGANIZATION IDENTIFIER

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
ORGANIZATION	ORGANIZATION OPERATIONAL ELEMENT INDICATOR CODE	ORG_OPFNL_EL MT_IC	THE CODE THAT DENOTES WHETHER AN INSTANCE OF ORGANIZATION IS CONSIDERED TO BE AN OPERATION FACILITY (OPFAC) OR OTHER SENDER OR RECEIVER OF INFORMATION.	ORGANIZATION Operational Element Indicator Code
ORGANIZATION	ORGANIZATION PRIMARY ACTIVITY CODE	ORG_PRM_ACT Y_CD	(12712) (A) THE CODE THAT REPRESENTS THE PRINCIPAL BUSINESS FUNCTION OF AN ORGANIZATION.	ORGANIZATION PRIMARY ACTIVITY CODE
ORGANIZATION	ORGANIZATION PRIMARY INDUSTRY CATEGORY CODE	ORG_PRM_INDS CAT_CD	(12697) (A) THE CODE THAT REPRESENTS A CLASSIFICATION OF THE PRINCIPAL BUSINESS AREA OF AN ORGANIZATION.	ORGANIZATION PRIMARY INDUSTRY CATEGORY CODE
ORGANIZATION	ORGANIZATION SERVICE TYPE CODE	ORG_SRV_TY_CD	THE CODE WHICH DENOTES THE SERVICE TYPE OF THE ORGANIZATION	ORGANIZATION-TYPE SERVICE CODE (FK) in ORGANIZATION-TYPE for the ORGANIZATION-TYPE IDENTIFIER (FK) in ORGANIZATION
ORGANIZATION	ORGANIZATION TYPE CODE	ORG_TY_CD	(12705) (A) THE CODE THAT REPRESENTS A KIND OF ORGANIZATION.	ORGANIZATION TYPE CODE
ORGANIZATION	ORGANIZATION VENDOR INDICATOR CODE	ORG_VNDR_IND _CD	(16302) (A) A CODE THAT INDICATES THAT THE ORGANIZATION IS A VENDOR.	ORGANIZATION VENDOR INDICATOR CODE
ORGANIZATION	UIC CODE	UIC_CD	THE UNIT IDENTIFIER CODE OF THE ORGANIZATION	ORGANIZATION Unit Identification Code (JCAPS)
PROCESS-ACTIVITY	ACTION IDENTIFIER	ACTION_ID	THE IDENTIFIER THAT REPRESENTS AN ACTION	N/A (deleted from the CADM in favor of TASK- MISSION-AREA)
PROCESS-ACTIVITY	PROCESS ACTIVITY DERIVATION	PRCS_ACTY_DE RIV	THE ACTIVITY FROM WHICH THIS ACTIVITY IS DERIVED	PROCESS-ACTIVITY-ASSOCIATION for PROCESS-ACTIVITY-ASSOCIATION Role Code = 1 (Is derived from).
PROCESS-ACTIVITY	PROCESS HIERARCHY NUMBER IDENTIFIER	PRCS_HIER_NUM M_ID	THE IDENTIFIER THAT REPRESENTS A NON-UJTL HIERARCHY NUMBER	TASK Hierarchy Number Identifier for a TASK associated to the PROCESS-ACTIVITY in PROCESS-ACTIVITY-TASK (all TASKs have hierarchy numbers, not just UJTLs)
PROCESS-ACTIVITY	PROCESS-ACTIVITY CREATION DATE	PRCS_ACTY_CR TN_DT	(20453) (A) THE ORIGINATION DATE OF A PROCESS-ACTIVITY.	PROCESS-ACTIVITY CREATION DATE
PROCESS-ACTIVITY	PROCESS-ACTIVITY DEFINITION TEXT	PRCS_ACTY_DF N_TX	(20253) (A) THE DEFINING TEXT OF A PROCESS-ACTIVITY.	PROCESS-ACTIVITY DEFINITION TEXT
PROCESS-ACTIVITY	PROCESS-ACTIVITY IDENTIFIER	PRCS_ACTY_ID	(29165) (A) THE IDENTIFIER THAT REPRESENTS A PROCESS-ACTIVITY.	PROCESS-ACTIVITY IDENTIFIER
PROCESS-ACTIVITY	PROCESS-ACTIVITY NAME	PRCS_ACTY_NM	(20251) (A) THE NAME OF A PROCESS-ACTIVITY.	PROCESS-ACTIVITY NAME
PROCESS-ACTIVITY	PROCESS-ACTIVITY SCOPE DESCRIPTION TEXT	PRCS_ACTY_SC P_DTX	(25942) (A) THE TEXT THAT DESCRIBES THE EXTENT OF A PROCESS-ACTIVITY.	PROCESS-ACTIVITY SCOPE DESCRIPTION TEXT

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
PROCESS-ACTIVITY	PROCESS-ACTIVITY SOURCE DOCUMENT TEXT	PRCS_ACTY_SR C_TX	(20255) (A) THE TEXT OF THE ORIGINATION DOCUMENTATION OF A PROCESS-ACTIVITY.	PROCESS-ACTIVITY SOURCE DOCUMENT TEXT
PROCESS-ACTIVITY	PROCESS-ACTIVITY UJTL CODE	PRO_ACT_UJTL _CD	THE CODE THAT DENOTES WHETHER THE PROCESS-ACTIVITY IS A UNIVERSAL JOINT TASK LIST (UJTL) TASK.	TASK Category Code = 2 (Universal Joint Task) for a TASK associated to the PROCESS-ACTIVITY in PROCESS-ACTIVITY-TASK
PROCESS-ACTIVITY	UJTL HIERARCHY NUMBER IDENTIFIER	UJTL_HIER_NUM _ID	THE IDENTIFIER THAT REPRESENTS THE UJTL HIERARCHY NUMBER	TASK Hierarchy Number Identifier for a TASK associated to the PROCESS-ACTIVITY in PROCESS-ACTIVITY-TASK (all TASKs have hierarchy numbers, not just UJTLs)
PROCESS-ACTIVITY	UJTL LEVEL WAR CODE	UJTL_LVL_WAR _CD	THE CODE WHICH DENOTES THE UJTL WAR CODE	TASK Command Level Code for a TASK associated to the PROCESS-ACTIVITY in PROCESS-ACTIVITY-TASK
PROCESS-ACTIVITY	UJTL TASK IDENTIFIER	UJTL_TASK_ID	THE IDENTIFIER THAT REPRESENTS THE UJTL TASK	TASK Identifier (FK) in PROCESS-ACTIVITY-TASK for a TASK associated to the PROCESS-ACTIVITY
PROCESS-ACTIVITY	UNIVERSAL-JOINT-TASK-LIST-TASK HIERARCHY SEQUENCE CODE	UJTL_TASK_HIE R_SEQ_CD	THE CODE THAT DENOTES THE SEQUENCE OF A SPECIFIC TASK IN THE HIERARCHY OF UNIVERSAL-JOINT-TASK-LIST TASKS.	TASK Hierarchy Sequence Code {JCAPS} for a TASK associated to the PROCESS-ACTIVITY in PROCESS-ACTIVITY-TASK
PROCESS-ACTIVITY	UNIVERSAL-JOINT-TASK-LIST-TASK VERSION IDENTIFIER	UJTL_1	THE IDENTIFIER THAT REPRESENTS A SPECIFIC VERSION OF A UNIVERSAL-JOINT-TASK-LIST-TASK.	PROCESS-ACTIVITY VERSION IDENTIFIER and TASK Version Identifier {JCAPS} for a TASK associated to the PROCESS-ACTIVITY
SERVICE CODE	SERVICE CODE IDENTIFIER	SERVICE_CODE _ID	THE IDENTIFIER THAT REPRESENTS A SERVICE CODE	ORGANIZATION-TYPE SERVICE CODE (domain values)
SERVICE CODE	SERVICE CODE TEXT	SERVICE_CODE _TXT	THE NAME OF THE SERVICE	ORGANIZATION-TYPE SERVICE CODE (definitions of domain values)
SOFTWARE ITEM VERSION	SW_IT_BLD_ID	SW_IT_BLD_ID		SOFTWARE-ITEM Build Identifier
SOFTWARE ITEM VERSION	SW_IT_BLD_ST_CD	SW_IT_BLD_ST_CD		SOFTWARE-ITEM Build Status Code {JCAPS}
SOFTWARE ITEM VERSION	SW_IT_CM_TX	SW_IT_CM_TX		SOFTWARE-ITEM Comment Text {JCAPS}
SOFTWARE ITEM VERSION	SW_IT_CPU_REQ_TX	SW_IT_CPU_REQ_TX		SOFTWARE-ITEM CPU Requirement Text {JCAPS}
SOFTWARE ITEM VERSION	SW_IT_DIICOE_CP_CD	SW_IT_DIICOE_CP_CD		SOFTWARE-ITEM DII COE Compliance Code {JCAPS}
SOFTWARE ITEM VERSION	SW_IT_DK_SP_REQ_TX	SW_IT_DK_SP_REQ_TX		SOFTWARE-ITEM Disk Space Requirement Text {JCAPS}
SOFTWARE ITEM VERSION	SW_IT_DMS_CP_CD	SW_IT_DMS_CP_CD		SOFTWARE-ITEM DMS Compliance Code {JCAPS}
SOFTWARE ITEM VERSION	SW_IT_ID	SW_IT_ID		MATERIEL-ITEM Alternate Identifier and MATERIEL-ITEM Alternate Identifier Source Name (SOFTWARE-ITEM is a zero-or-one "Z" child of MATERIEL-ITEM with MATERIEL-ITEM Software Indicator Code = 1.
SOFTWARE ITEM VERSION	SW_IT_MEM_REQ_TX	SW_IT_MEM_REQ_TX		SOFTWARE-ITEM Memory Requirement Text {JCAPS}

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Annex F (Mapping JCAPS Attributes)

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Mapping JCAPS Data Requirements to IDA Proposal

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
SOFTWARE-ITEM VERSION	SW_IT_OP_ST_CD	SW_IT_OP_ST_CD		SOFTWARE-ITEM Operational Status Code {JCAPS}
SOFTWARE-ITEM VERSION	SW_IT_REL_DT	SW_IT_REL_DT		SOFTWARE-ITEM Release Date
SOFTWARE-ITEM VERSION	SW_IT_V_OP_ST_CD	SW_IT_V_OP_ST_CD		SOFTWARE-ITEM Version Operational Status Code {JCAPS}
SOFTWARE-ITEM VERSION	SW_IT_VER	SW_IT_VER		SOFTWARE-ITEM Version Identifier
SOFTWARE-ITEM VERSION	SW_IT_VER_DTX	SW_IT_VER_DTX		SOFTWARE-ITEM Version Description Text {JCAPS}
SOFTWARE-ITEM VERSION	SW_IT_VER_ID	SW_IT_VER_ID		SOFTWARE-ITEM Version Identifier
SOFTWARE-ITEM VERSION	SW_IT_Y2K_C_DT	SW_IT_Y2K_C_DT		SOFTWARE-ITEM Year 2000 Compliance Date {JCAPS}
SOFTWARE-ITEM VERSION	SW_IT_Y2K_COMP_LVL_CD	SW_IT_Y2K_COMP_LVL_CD		SOFTWARE-ITEM Year 2000 Compliance Level Code {JCAPS}
SOFTWARE-ITEM VERSION	SW_IT_Y2K_CST_TX	SW_IT_Y2K_CST_TX		SOFTWARE-ITEM Year 2000 Compliance Status Text {JCAPS}
SOFTWARE-ITEM VERSION	SW_IT_Y2K_PH_NM	SW_IT_Y2K_PH_NM		SOFTWARE-ITEM Year 2000 Phase Name {JCAPS}
SOFTWARE-ITEM	SOFTWARE-ITEM ABBREVIATED NAME	SW_IT_AB_NM	THE SHORT NAME OF A SOFTWARE-ITEM.	SOFTWARE-ITEM Abbreviated Name {JCAPS}
SOFTWARE-ITEM	SOFTWARE-ITEM BUILD IDENTIFIER	SW_IT_BLD_ID	THE IDENTIFIER FOR A SPECIFIC INTEGRATION EVENT FOR A SOFTWARE-ITEM.	SOFTWARE-ITEM Build Identifier
SOFTWARE-ITEM	SOFTWARE-ITEM BUILD STATUS CODE	SW_IT_BLD_ST_CD	THE CODE THAT DENOTES THE STATUS OF A SOFTWARE-ITEM BUILD.	SOFTWARE-ITEM Build Status Code {JCAPS}
SOFTWARE-ITEM	SOFTWARE-ITEM CATEGORY CODE	SW_IT_CAT_CD	THE CODE THAT DENOTES THE CLASS OF A SOFTWARE-ITEM.	SOFTWARE-ITEM Category Code
SOFTWARE-ITEM	SOFTWARE-ITEM COMMENT TEXT	SW_IT_CM_TX	THE TEXT THAT AMPLIFIES A SOFTWARE-ITEM.	SOFTWARE-ITEM Comment Text {JCAPS}
SOFTWARE-ITEM	SOFTWARE-ITEM DESCRIPTION TEXT	SW_IT_DTX	THE TEXT THAT DESCRIBES A SOFTWARE-ITEM.	SOFTWARE-ITEM Description Text
SOFTWARE-ITEM	SOFTWARE-ITEM DII COE COMPLIANCE CODE	SW_IT_DIICOE_CP_CD	THE CODE THAT DENOTES WHETHER OR NOT THE CURRENT VERSION OF A SOFTWARE-ITEM COMPLIES WITH THE DII COE.	SOFTWARE-ITEM DII COE Compliance Code {JCAPS}
SOFTWARE-ITEM	SOFTWARE-ITEM DISK SPACE REQUIREMENT TEXT	SW_IT_DK_SP_RQ_TX	THE TEXT THAT DESCRIBES THE DISK SPACE REQUIRED FOR A SOFTWARE-ITEM.	SOFTWARE-ITEM Disk Space Requirement Text {JCAPS}
SOFTWARE-ITEM	SOFTWARE-ITEM DMS COMPLIANCE CODE	SW_IT_DMS_CP_CD	THE CODE THAT DENOTES WHETHER OR NOT THE CURRENT VERSION OF A SOFTWARE-ITEM COMPLIES WITH THE DEFENSE MESSAGING SYSTEM.	SOFTWARE-ITEM DMS Compliance Code {JCAPS}

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
SOFTWARE-ITEM	SOFTWARE-ITEM LONG NAME	SW_IT_LG_NM	THE FULL LENGTH NAME OF A SOFTWARE-ITEM.	SOFTWARE-ITEM Long Name {JCAPS}
SOFTWARE-ITEM	SOFTWARE-ITEM MANUFACTURER NAME	SW_IT_MFG_NM	THE NAME OF THE MANUFACTURER OF A SOFTWARE-ITEM.	SOFTWARE-ITEM Manufacturer Name {JCAPS}
SOFTWARE-ITEM	SOFTWARE-ITEM MAXIMUM SIMULTANEOUS USER QUANTITY	SW_IT_MS_SU_QY	THE MAXIMUM NUMBER OF SIMULTANEOUS USERS.	SOFTWARE-ITEM Maximum Simultaneous User Quantity {JCAPS}
SOFTWARE-ITEM	SOFTWARE-ITEM MEMORY REQUIREMENT TEXT	SW_IT_MEM_REQ_TX	THE TEXT THAT DESCRIBES THE MEMORY CAPACITY REQUIRED FOR THE SOFTWARE-ITEM TO FUNCTION CORRECTLY.	SOFTWARE-ITEM Memory Requirement Text {JCAPS}
SOFTWARE-ITEM	SOFTWARE-ITEM OPERATIONAL STATUS CODE	SW_IT_OP_ST_CD	THE CODE THAT DENOTES THE OPERATIONAL STATUS OF THE CURRENT VERSION OF A SOFTWARE-ITEM.	SOFTWARE-ITEM Operational Status Code {JCAPS}
SOFTWARE-ITEM	SOFTWARE-ITEM RELEASE DATE	SW_IT_REL_DT	THE DATE A SPECIFIC SOFTWARE-ITEM WAS DISTRIBUTED FOR GENERAL USE.	SOFTWARE-ITEM Release Date
SOFTWARE-ITEM	SOFTWARE-ITEM SOURCE TYPE CODE	SW_IT_SR_TV_CD	THE CODE THAT REPRESENTS THE SOURCE OF A SOFTWARE-ITEM.	SOFTWARE-ITEM Source Type Code {JCAPS}
SOFTWARE-ITEM	SOFTWARE-ITEM TYPE CODE	SW_IT_TY_CD	THE CODE THAT DENOTES A KIND OF SOFTWARE-ITEM.	SOFTWARE-ITEM Type Code {JCAPS}
SOFTWARE-ITEM	SOFTWARE-ITEM VERSION DESCRIPTION TEXT	SW_IT_VER_TXT	THE TEXT THAT DESCRIBES A SPECIFIC VERSION OF A SOFTWARE-ITEM.	SOFTWARE-ITEM Version Description Text {JCAPS}
SOFTWARE-ITEM	SOFTWARE-ITEM VERSION OPERATIONAL STATUS CODE	SW_IT_V_OP_ST_CD	THE CODE THAT DENOTES THE OPERATIONAL STATUS OF A PARTICULAR VERSION OF A SOFTWARE-ITEM.	SOFTWARE-ITEM Version Operational Status Code {JCAPS}
SOFTWARE-ITEM	SOFTWARE-ITEM YEAR 2000 COMPLIANCE DATE	SW_IT_Y2000_C_DT	THE DATE BY WHICH A SOFTWARE-ITEM WILL COMPLY WITH YEAR 2000 REQUIREMENTS.	SOFTWARE-ITEM Year 2000 Compliance Date {JCAPS}
SOFTWARE-ITEM	SOFTWARE-ITEM YEAR 2000 COMPLIANCE STATUS TEXT	SW_IT_Y2000_C_ST_TX	THE TEXT THAT DESCRIBES THE CURRENT STATUS OF THE COMPLIANCE OF A SOFTWARE-ITEM WITH YEAR 2000 REQUIREMENTS.	SOFTWARE-ITEM Year 2000 Compliance Status Text {JCAPS}
SOFTWARE-ITEM	SOFTWARE-ITEM YEAR 2000 PHASE NAME	SW_IT_Y2000_P_H_NM	THE NAME OF THE SOFTWARE DEVELOPMENT PHASE OF A SOFTWARE-ITEM RELATIVE TO THE YEAR 2000 REQUIREMENT.	SOFTWARE-ITEM Year 2000 Phase Name {JCAPS}
SOFTWARE-ITEM	SW_IT_COTS_GOTS_CD	SW_IT_COTS_GOTS_CD		SOFTWARE-ITEM COTS Indicator Code and SOFTWARE-ITEM GOTS Indicator Code
SOFTWARE-ITEM	SW_IT_ID	SW_IT_ID		MATERIEL-ITEM Alternate Identifier and MATERIEL-ITEM Alternate Identifier Source Name (SOFTWARE-ITEM is a zero-or-one "Z" child of MATERIEL-ITEM with MATERIEL-ITEM Software Indicator Code = 1.

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
SYSTEM	C2E_ID	C2E_ID		NODE Identifier (FK) in NODE-SYSTEM
SYSTEM	SY_CAPACITY	SY_CAPACITY		CAPABILITY IDENTIFIER and CAPABILITY Name for a CAPABILITY associated to SYSTEM in SYSTEM-CAPABILITY
SYSTEM	SY_CAPACITY_UNIT	SY_CAPACITY_UNIT		CAPABILITY MEASUREMENT UNIT CODE for a CAPABILITY associated to SYSTEM in SYSTEM-CAPABILITY
SYSTEM	SY_FUNDING_SOURCES	SY_FUNDING_SOURCES		NODE-SYSTEM Funding Source Text {JCAPS}
SYSTEM	SY_INFO_ASSURE	SY_INFO_ASSURE		NODE-SYSTEM Information Assurance Text {JCAPS}
SYSTEM	SY_ISSUBSYSTEM	SY_ISSUBSYSTEM		NODE-SYSTEM-ASSOCIATION Type Code = 11 (Is a subsystem of)
SYSTEM	SY_NRML_USE_DAYS	SY_NRML_USE_DAYS		NODE-SYSTEM Normal Use Days Quantity {JCAPS}
SYSTEM	SY_NRML_USE_HRS	SY_NRML_USE_HRS		NODE-SYSTEM Normal Use Hours Quantity {JCAPS}
SYSTEM	SY_PEAK_USE_DAYS	SY_PEAK_USE_DAYS		NODE-SYSTEM Peak Use Days Quantity {JCAPS}
SYSTEM	SY_PEAK_USE_HRS	SY_PEAK_USE_HRS		NODE-SYSTEM Peak Use Hours Quantity {JCAPS}
SYSTEM	SY_SEC_PROVIS	SY_SEC_PROVIS		NODE-SYSTEM Security Provisions Text {JCAPS}
SYSTEM	SY_SRV_PROVIDED	SY_SRV_PROVIDED		NODE-SYSTEM Services Provided Text {JCAPS}
SYSTEM	SY_SRV_RMKS	SY_SRV_RMKS		NODE-SYSTEM Services Remarks Text {JCAPS}
SYSTEM	SY_SUP_SRV_PROVIDED	SY_SUP_SRV_PROVIDED		NODE-SYSTEM Supplementary Services Provided Text {JCAPS}
SYSTEM	SY_XMT_CLS_CD	SY_XMT_CLS_CD		NODE-SYSTEM Transmission Classification Code {JCAPS}
SYSTEM	SYS_ID	SYS_ID		SYSTEM Identifier (FK) and NODE-SYSTEM Identifier in NODE-SYSTEM
SYSTEM	SYS_NAME	SYS_NAME		NODE-SYSTEM Name {JCAPS}
SYSTEM	SYSTEM ABBREVIATED NAME	SY_ABBR_NM	A SHORTENED FORM OF THE NAME OF A SYSTEM.	NODE-SYSTEM Abbreviated Name {JCAPS}
SYSTEM	SYSTEM CLASSIFICATION CODE	SYS_CLS_CD	THE CODE THAT DENOTES THE LEVEL OF SECURITY CLASSIFICATION OF A SYSTEM.	NODE-SYSTEM Classification Code {JCAPS}
SYSTEM	SYSTEM DESCRIPTION TEXT	SY_DSC_TX	(44654) (D) THE TEXT THAT DESCRIBES A SYSTEM.	NODE-SYSTEM Description Text {JCAPS}
SYSTEM	SYSTEM HARD DISK CAPACITY TEXT	SY_HRD_DSK_C_P_TX	THE TEXT THAT DESCRIBES THE HARD DISK CAPACITY OF A SYSTEM.	NODE-SYSTEM Hard Disk Capacity Text {JCAPS}
SYSTEM	SYSTEM IMPLEMENTATION VERSION DESCRIPTION TEXT	SY_IMP_VER_DT_X	THE TEXT THAT DESCRIBES A SPECIFIC VERSION OF A SPECIFIC IMPLEMENTATION OF A SYSTEM.	NODE-SYSTEM Implementation Version Description Text {JCAPS}

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
SYSTEM	SYSTEM IMPLEMENTATION VERSION NAME	SY_IMP_VER_N M	THE NAME OF A SPECIFIC VERSION OF A SPECIFIC IMPLEMENTATION OF A SYSTEM.	NODE-SYSTEM Implementation Version Name {JCAPS}
SYSTEM	SYSTEM IMPLEMENTATION VERSION OPERATIONAL STATUS CODE	SY_IMP_VER_O P_ST_CD	THE CODE THAT DENOTES THE OPERATIONAL STATUS OF A SPECIFIC VERSION OF A SPECIFIC IMPLEMENTATION OF A SYSTEM.	NODE-SYSTEM Implementation Version Operational Status Code {JCAPS}
SYSTEM	SYSTEM LEGACY MIGRATION SYSTEM CODE	SY_LEG_MIG_C D	THE CODE THAT DENOTES WHETHER OR NOT THE SYSTEM IS A LEGACY SYSTEM TARGETED FOR MIGRATION.	NODE-SYSTEM Legacy Migration System Code {JCAPS}
SYSTEM	SYSTEM MEMORY CAPACITY TEXT	SY_MEM_CP_TX	THE TEXT THAT DESCRIBES THE MEMORY CAPACITY OF A SYSTEM.	NODE-SYSTEM Memory Capacity Text {JCAPS}
SYSTEM	SYSTEM MOBILITY CODE	SY_MBL_CD	THE CODE THAT DENOTES WHETHER OR NOT A SYSTEM IS MOBILE.	NODE-SYSTEM Mobility Code {JCAPS}
SYSTEM	SYSTEM NAME	SYSTEM_NAME	(33207) (D) THE NAME OF A SYSTEM.	NODE-SYSTEM Name {JCAPS}
SYSTEM	SYSTEM NETWORK ADDRESS TEXT	SY_NW_ADDR_T X	THE TEXT THAT REPRESENTS THE NETWORK ADDRESS OF A SYSTEM.	NODE-SYSTEM Network Address Text {JCAPS}
SYSTEM	SYSTEM NETWORK INTERFACE DESCRIPTION TEXT	SY_NW_INT_DT X	THE TEXT THAT DESCRIBES THE NETWORK INTERFACE OF A SYSTEM.	NODE-SYSTEM Network Interface Description Text {JCAPS}
SYSTEM	SYSTEM NETWORK INTERFACE IDENTIFIER	SY_NW_INT_ID	THE IDENTIFIER THAT REPRESENTS THE NETWORK INTERFACE OF A SYSTEM.	NODE-SYSTEM Network Interface Identifier {JCAPS}
SYSTEM	SYSTEM NOMINAL USERS QUANTITY	SY_NML_USR_Q Y	THE NUMBER OF PERSONS THAT TYPICALLY OPERATE A SPECIFIC SYSTEM AT THE SAME TIME.	SYSTEM Nominal Users Quantity
SYSTEM	SYSTEM PURPOSE CODE	SY_PRPS_CD	THE CODE THAT DESIGNATES THE OBJECTIVE OF A SPECIFIC SYSTEM.	SYSTEM Purpose Text
SYSTEM	SYSTEM STATUS CODE	SY_STAT_CD	THE CODE THAT DENOTES THE CURRENT STATUS OF A SYSTEM.	NODE-SYSTEM Status Code {JCAPS}
SYSTEM	SYSTEM UNIT COST AMOUNT	SY_UNIT_COST_ AM	THE AMOUNT OF THE PLANNING COST OF A SINGLE INSTANCE OF A SYSTEM.	SYSTEM Unit Cost Amount
SYSTEM	SYSTEM-TYPE IDENTIFIER	SY_TY_ID	A class of SYSTEM.	SYSTEM-TYPE Identifier (FK) in SYSTEM
SYSTEM	UIC_CD	UIC_CD		ORGANIZATION IDENTIFIER (FK) in SYSTEM-ORGANIZATION for various roles specified in SYSTEM-ORGANIZATION Role Code and SYSTEM-ORGANIZATION Role Effective Date
SYSTEM CATEGORY	SYS_CAT_ID	SYS_CAT_ID		SYSTEM-TYPE Identifier
SYSTEM CATEGORY	SYS_CAT_NAME	SYS_CAT_NAME		SYSTEM-TYPE Name
SYSTEM CATEGORY	SYS_CAT_PARENT_ID	SYS_CAT_PARE NT_ID		Parent SYSTEM-TYPE Identifier (FK) in SYSTEM-TYPE-ASSOCIATION {JCAPS}

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
SYSTEM IEM	DEST_SYS_ID	SYS_ID_2		Recipient SYSTEM Identifier (FK) in INFORMATION-EXCHANGE-MATRIX-ELEMENT
SYSTEM IEM	INP_DATA_CONT_ID	MI_ID		Data Item MATERIEL-ITEM Identifier (FK) in INFORMATION-EXCHANGE-MATRIX-ELEMENT
SYSTEM IEM	INP_FORMAT_CD	DT_IT_TY_CD		DATA-ITEM-TYPE Code associated with the DATA-ITEM-TYPE Identifier (FK) in INFORMATION-REQUIREMENT-DATA-ITEM-TYPE that, in turn, is associated with the Info Req GUIDANCE Identifier (FK) in INFORMATION-EXCHANGE-MATRIX-ELEMENT
SYSTEM IEM	INP_MED_FORMAT_ID	INP_MED_FORMT_ID		Message Standard AGREEMENT Identifier (FK) in INFORMATION-EXCHANGE-MATRIX-ELEMENT
SYSTEM IEM	INP_MEDIA_ID	COM_MED_ID		COMMUNICATION-MEDIUM Identifier (FK) in INFORMATION-EXCHANGE-MATRIX-ELEMENT
SYSTEM IEM	INP_MSG_CONT_ID	MESSAGE_ID		Message Standard AGREEMENT Identifier (FK) in INFORMATION-EXCHANGE-MATRIX-ELEMENT
SYSTEM IEM	INTERFACE IDENTIFIER	INTF_ID		INTERFACE Identifier (JCAPS) (FK) in INFORMATION-EXCHANGE-MATRIX-ELEMENT
SYSTEM IEM	OUT_DATA_MI_ID	MI_ID		Data Item MATERIEL-ITEM Identifier (FK) in INFORMATION-EXCHANGE-MATRIX-ELEMENT
SYSTEM IEM	OUT_FORMAT_CD	DT_IT_TY_CD		DATA-ITEM-TYPE Code associated with the DATA-ITEM-TYPE Identifier (FK) in INFORMATION-REQUIREMENT-DATA-ITEM-TYPE that, in turn, is associated with the Info Req GUIDANCE Identifier (FK) in INFORMATION-EXCHANGE-MATRIX-ELEMENT
SYSTEM IEM	OUT_MED_FORMAT_ID	OUT_MED_FOR MT_ID		Message Standard AGREEMENT Identifier (FK) in INFORMATION-EXCHANGE-MATRIX-ELEMENT
SYSTEM IEM	OUT_MEDIA_ID	COM_MED_ID		COMMUNICATION-MEDIUM Identifier (FK) in INFORMATION-EXCHANGE-MATRIX-ELEMENT
SYSTEM IEM	OUT_MSG_CONT_ID	MESSAGE_ID		Message Standard AGREEMENT Identifier (FK) in INFORMATION-EXCHANGE-MATRIX-ELEMENT
SYSTEM IEM	SOURCE_SYS_ID	SYS_ID_1		Provider SYSTEM Identifier (FK) in INFORMATION-EXCHANGE-MATRIX-ELEMENT
SYSTEM IEM	SYS_FUNC_ID	FUNC_ID		PROCESS-ACTIVITY IDENTIFIER (FK) in INFORMATION-EXCHANGE-MATRIX-ELEMENT (SYSTEM-FUNCTION is a subtype of PROCESS-ACTIVITY)
SYSTEM IEM	SYS_FUNC_VID	FUNC_VID		PROCESS-ACTIVITY VERSION IDENTIFIER associated with the PROCESS-ACTIVITY IDENTIFIER (FK) in INFORMATION-EXCHANGE-MATRIX-ELEMENT (SYSTEM-FUNCTION is a subtype of PROCESS-ACTIVITY)
SYSTEM IEM	SYS_IEM_D_TXT	SYS_IEM_D_TXT		DOCUMENT DESCRIPTION TEXT associated with the Information Exchange Matrix DOCUMENT Identifier (FK) in INFORMATION-EXCHANGE-MATRIX-ELEMENT

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
SYSTEM IEM	SYS_IEM_ID	SYS_IEM_ID		Information Exchange Matrix DOCUMENT Identifier (FK) in INFORMATION-EXCHANGE-MATRIX-ELEMENT with INFORMATION-EXCHANGE-MATRIX Type Code = 2 (System Information Exchange Matrix); and INFORMATION-EXCHANGE-MATRIX-ELEMENT Identifier
SYSTEM IEM	SYS_IEM_NM	SYS_IEM_NM		DOCUMENT NAME associated with the Information Exchange Matrix DOCUMENT Identifier (FK) in INFORMATION-EXCHANGE-MATRIX-ELEMENT
SYSTEM SOFTWARE ITEM VERSION	SW_IT_VER_ID	SW_IT_VER_ID		Software Item MATERIEL-ITEM Identifier (FK) in SYSTEM-SOFTWARE-ITEM
SYSTEM SOFTWARE ITEM VERSION	SYS_ID	SYS_ID		SYSTEM Identifier (FK) in SYSTEM-SOFTWARE-ITEM
SYSTEM SOFTWARE ITEM VERSION	SYS_SW_IT_VER_ID	SYS_SW_IT_VER_ID		Software Item MATERIEL-ITEM Identifier (FK) in SYSTEM-SOFTWARE-ITEM
SYSTEM TRANSMISSION INFO	ANTN_TY_NM	ANTN_TY_NM		NODE-SYSTEM-TRANSMISSION Antenna Type Name (JCAPS)
SYSTEM TRANSMISSION INFO	COMM_MODE	COMM_MODE		NODE-SYSTEM-TRANSMISSION Communication Mode Code (JCAPS)
SYSTEM TRANSMISSION INFO	DATA_RATE	DATA_RATE		NODE-SYSTEM-TRANSMISSION Data Rate (JCAPS)
SYSTEM TRANSMISSION INFO	NUM_CHANNELS	NUM_CHANNELS		NODE-SYSTEM-TRANSMISSION Channel Quantity (JCAPS)
SYSTEM TRANSMISSION INFO	OH_RATE	OH_RATE		NODE-SYSTEM-TRANSMISSION Overhead Rate (JCAPS)
SYSTEM TRANSMISSION INFO	RX_FREQ_DISP_UNITS	RX_FREQ_DISP_UNITS		NODE-SYSTEM-TRANSMISSION Receive Frequency Display Unit Code (JCAPS)
SYSTEM TRANSMISSION INFO	RX_FREQ_HZ	RX_FREQ_HZ		NODE-SYSTEM-TRANSMISSION Receive Frequency Rate (JCAPS)
SYSTEM TRANSMISSION INFO	SYS_ID	SYS_ID		SYSTEM Identifier (FK) and NODE-SYSTEM Identifier (FK) in NODE-SYSTEM-TRANSMISSION
SYSTEM TRANSMISSION INFO	TX_FREQ_DISP_UNITS	TX_FREQ_DISP_UNITS		NODE-SYSTEM-TRANSMISSION Transmit Frequency Display Unit Code (JCAPS)
SYSTEM TRANSMISSION INFO	TX_FREQ_HZ	TX_FREQ_HZ		NODE-SYSTEM-TRANSMISSION Transmit Frequency Rate (JCAPS)
SYSTEM TYPE ASSOCIATION	REL_SYS_TY_ID	SY_TY_ID		Subordinate SYSTEM Identifier (FK) in SYSTEM-ASSOCIATION
SYSTEM TYPE ASSOCIATION	REL_TYPE	REL_TYPE		SYSTEM-ASSOCIATION Type Code
SYSTEM TYPE ASSOCIATION	SY_TY_ASN_ID	SY_TY_ASN_ID		SYSTEM-ASSOCIATION IDENTIFIER
SYSTEM TYPE ASSOCIATION	SYS_TY_ID	SY_TY_ID		Ordinate SYSTEM Identifier (FK) in SYSTEM-ASSOCIATION
SYSTEM TYPE TRANSMISSION INFO	ANTN_TY_NM	ANTN_TY_NM		NODE-SYSTEM-TRANSMISSION Antenna Type Name (JCAPS)
SYSTEM TYPE TRANSMISSION INFO	COMM_MODE	COMM_MODE		NODE-SYSTEM-TRANSMISSION Communication Mode Code (JCAPS)

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
SYSTEM TYPE-TRANSMISSION INFO	DATA_RATE	DATA_RATE		NODE-SYSTEM-TRANSMISSION Data Rate {JCAPS}
SYSTEM TYPE-TRANSMISSION INFO	NUM_CHANNELS	NUM_CHANNELS		NODE-SYSTEM-TRANSMISSION Channel Quantity {JCAPS}
SYSTEM TYPE-TRANSMISSION INFO	OH_RATE	OH_RATE		NODE-SYSTEM-TRANSMISSION Overhead Rate {JCAPS}
SYSTEM TYPE-TRANSMISSION INFO	RX_FREQ_HIGH_DISP_UNITS	RX_FREQ_HIGH_DISP_UNITS		SYSTEM-TRANSMISSION Receive Frequency Maximum Display Unit Code {JCAPS}
SYSTEM TYPE-TRANSMISSION INFO	RX_FREQ_HIGH_HZ	RX_FREQ_HIGH_HZ		SYSTEM-TRANSMISSION Receive Frequency Maximum Rate {JCAPS}
SYSTEM TYPE-TRANSMISSION INFO	RX_FREQ_LOW_DISP_UNITS	RX_FREQ_LOW_DISP_UNITS		SYSTEM-TRANSMISSION Receive Frequency Minimum Display Unit Code {JCAPS}
SYSTEM TYPE-TRANSMISSION INFO	RX_FREQ_LOW_HZ	RX_FREQ_LOW_HZ		SYSTEM-TRANSMISSION Receive Frequency Minimum Rate {JCAPS}
SYSTEM TYPE-TRANSMISSION INFO	SY_TY_ID	SY_TY_ID		SYSTEM Identifier (FK) in SYSTEM-TRANSMISSION
SYSTEM TYPE-TRANSMISSION INFO	TX_FREQ_HIGH_DISP_UNITS	TX_FREQ_HIGH_DISP_UNITS		SYSTEM-TRANSMISSION Transmit Frequency Maximum Display Unit Code {JCAPS}
SYSTEM TYPE-TRANSMISSION INFO	TX_FREQ_HIGH_HZ	TX_FREQ_HIGH_HZ		SYSTEM-TRANSMISSION Transmit Frequency Maximum Rate {JCAPS}
SYSTEM TYPE-TRANSMISSION INFO	TX_FREQ_LOW_DISP_UNITS	TX_FREQ_LOW_DISP_UNITS		SYSTEM-TRANSMISSION Transmit Frequency Minimum Display Unit Code {JCAPS}
SYSTEM TYPE-TRANSMISSION INFO	TX_FREQ_LOW_HZ	TX_FREQ_LOW_HZ		SYSTEM-TRANSMISSION Transmit Frequency Minimum Rate {JCAPS}
SYSTEM TYPE-INTERFACE TYPE	INTERFACE TYPE IDENTIFIER	INTF_TY_ID		INTERFACE-TYPE Identifier {JCAPS} (FK) in SYSTEM-INTERFACE-TYPE
SYSTEM TYPE-INTERFACE TYPE	SY_TY_ID	SY_TY_ID		SYSTEM Identifier (FK) in SYSTEM-INTERFACE-TYPE
SYSTEM TYPE-INTERFACE TYPE	SY_TY_INTF_TY_ID	SY_TY_INTF_TY_ID		SYSTEM-INTERFACE-TYPE Identifier {JCAPS}
SYSTEM TYPE-SOFTWARE ITEM VERSION	SW_IT_VER_ID	SW_IT_VER_ID		Software Item MATERIEL-ITEM Identifier (FK) in SYSTEM-SOFTWARE-ITEM
SYSTEM TYPE-SOFTWARE ITEM VERSION	SY_TY_ID	SY_TY_ID		SYSTEM Identifier (FK) in SYSTEM-SOFTWARE-ITEM
SYSTEM TYPE-SOFTWARE ITEM VERSION	SY_TY_SW_IT_VER_ID	SY_TY_SW_IT_VER_ID		Software Item MATERIEL-ITEM Identifier (FK) in SYSTEM-SOFTWARE-ITEM
SYSTEM-ASSOCIATION	REL_SYS_ID	SYS_ID		Child SYSTEM Identifier (FK) and Child NODE-SYSTEM Identifier (FK) in NODE-SYSTEM-ASSOCIATION {JCAPS}
SYSTEM-ASSOCIATION	REL_TYPE	REL_TYPE		NODE-SYSTEM-ASSOCIATION Relationship Type Code {JCAPS}
SYSTEM-ASSOCIATION	SYS_ID	SYS_ID		Parent SYSTEM Identifier (FK) and Parent NODE-SYSTEM Identifier (FK) in NODE-SYSTEM-ASSOCIATION {JCAPS}

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
SYSTEM-ASSOCIATION	SYSTEM-ASSOCIATION DESCRIPTION TEXT	SY_ASN_DSC_T X	(44669) (D) THE TEXT THAT DESCRIBES THE NATURE OF THE ASSOCIATION BETWEEN TWO SYSTEMS.	NODE-SYSTEM-ASSOCIATION Description Text {JCAPS}
SYSTEM-ASSOCIATION	SYSTEM-ASSOCIATION IDENTIFIER	SY_ASN_ID	THE IDENTIFIER THAT REPRESENTS A SYSTEM-ASSOCIATION.	NODE-SYSTEM-ASSOCIATION Identifier {JCAPS}
SYSTEM-ASSOCIATION	SYSTEM-ASSOCIATION INTERFACE TYPE CODE	SY_ASN_INTF_T Y_CD	THE CODE THAT DESIGNATES THE CLASS OF INTEROPERATING RELATIONSHIP BETWEEN TWO SYSTEMS IN A SYSTEM-ASSOCIATION.	NODE-SYSTEM-ASSOCIATION Interface Type Code {JCAPS}
SYSTEM-ASSOCIATION	SYSTEM-ASSOCIATION INTEROPERABILITY LEVEL CODE	SY_ASN_INTRO P_LVL_CD	THE CODE THAT DESIGNATES THE APPLICABLE KIND OF INTEROPERABILITY BETWEEN TWO SYSTEMS.	NODE-SYSTEM-ASSOCIATION Interoperability Level Code {JCAPS}
SYSTEM-ASSOCIATION	SYSTEM-ASSOCIATION NAME	SY_ASN_NM	THE NAME OF A SYSTEM ASSOCIATION.	NODE-SYSTEM-ASSOCIATION Name {JCAPS}
SYSTEM-ASSOCIATION	SYSTEM-ASSOCIATION TYPE CODE	SY_ASN_TY_CD	THE CODE THAT DENOTES THE KIND OF SYSTEM-ASSOCIATION.	NODE-SYSTEM-ASSOCIATION Type Code {JCAPS}
SYSTEM-TYPE	SY_ISSUBSYSTEM	SY_ISSUBSYST EM		SYSTEM-ASSOCIATION Type Code = 11 (Is a subsystem of)
SYSTEM-TYPE	SY_TY_ABBR_NM	SY_TY_ABBR_N M		SYSTEM Short Name
SYSTEM-TYPE	SY_TY_CD	SY_TY_CD		SYSTEM Role Category Code
SYSTEM-TYPE	SY_TY_MFG_MOD_TXT	SY_TY_MFG_MO D_TXT		SYSTEM Manufacturer Modification Text {JCAPS}
SYSTEM-TYPE	SY_TY_MFG_NAME	SY_TY_MFG_NA ME		SYSTEM Manufacturer Name {JCAPS}
SYSTEM-TYPE	SY_TY_NM	SY_TY_NM		SYSTEM Name
SYSTEM-TYPE	SY_TY_SFT_INF_TXT	SY_TY_SFT_INF _TXT		SYSTEM Software Interface Text {JCAPS}
SYSTEM-TYPE	SY_TY_STAT_CD	SY_TY_STAT_C D		SYSTEM Status Code {JCAPS}
SYSTEM-TYPE	SY_TY_Y2K_COMP_CD	SY_TY_Y2K_CO MP_CD		SYSTEM Year 2000 Compliance Level Code {JCAPS}
SYSTEM-TYPE	SYS_CAT_ID	SYS_CAT_ID		SYSTEM-TYPE Identifier (FK) in SYSTEM
SYSTEM-TYPE	SYS_MODEL	SYS_MODEL		SYSTEM Model Identifier {JCAPS}
SYSTEM-TYPE	SYSTEM-TYPE DESCRIPTION TEXT	SY_TY_DSC_TX	(33304) (D) THE TEXT THAT DESCRIBES A SYSTEM TYPE.	SYSTEM Description Text
SYSTEM-TYPE	SYSTEM-TYPE IDENTIFIER	SY_TY_ID	(33216) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM TYPE.	SYSTEM Identifier
SYSTEM-TYPE	SYSTEM-TYPE NAME	SYSTEM_TYPE_ NAME	(33217) (D) THE NAME OF A SYSTEM TYPE.	SYSTEM Name
SYSTEM-TYPE	Y2K_COMP_LVL_CD	Y2K_COMP_LVL _CD		SYSTEM Year 2000 Compliance Level Code {JCAPS}

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
TASK-MISSION-AREA	MISSION-AREA TYPE CODE	MSN_AR_TYP_CD	(16078) (A) THE CODE THAT DENOTES A CLASS OF MISSION-AREA.	MISSION-AREA TYPE CODE (FK) in TASK-MISSION-AREA
TASK-MISSION-AREA	TASK-MISSION-AREA DESCRIPTION TEXT	TASK_MSN_AR_DTX	THE TEXT THAT DESCRIBES A MISSION-AREA-TASK.	TASK-MISSION-AREA Description Text (JCAPS)
UNIVERSAL-JOINT-TASK-LIST-TASK	UJTL_HIER_NUM_ID	UJTL_HIER_NUM_ID		TASK Hierarchy Number Identifier
UNIVERSAL-JOINT-TASK-LIST-TASK	UJTL_LVL_WAR_CD	UJTL_LVL_WAR_CD		TASK Command Level Code
UNIVERSAL-JOINT-TASK-LIST-TASK	UJTL_TASK_ID	UJTL_TASK_ID		TASK IDENTIFIER for TASK Category Code = 2 (Universal Joint Task)
UNIVERSAL-JOINT-TASK-LIST-TASK	UNIVERSAL-JOINT-TASK-LIST-TASK DESCRIPTION TEXT	UJTL_TASK_DTX	THE TEXT THAT DESCRIBES A UNIVERSAL-JOINT-TASK-LIST-TASK.	TASK DESCRIPTION TEXT
UNIVERSAL-JOINT-TASK-LIST-TASK	UNIVERSAL-JOINT-TASK-LIST-TASK HIERARCHY SEQUENCE CODE	UJTL_TASK_HIER_SEQ_CD	THE CODE THAT DENOTES THE SEQUENCE OF A SPECIFIC TASK IN THE HIERARCHY OF UNIVERSAL-JOINT-TASK-LIST TASKS.	TASK Hierarchy Sequence Code (JCAPS)
UNIVERSAL-JOINT-TASK-LIST-TASK	UNIVERSAL-JOINT-TASK-LIST-TASK NAME	UJTL_TASK_NM	THE NAME OF A UNIVERSAL-JOINT-TASK-LIST-TASK.	TASK NAME
UNIVERSAL-JOINT-TASK-LIST-TASK	UNIVERSAL-JOINT-TASK-LIST-TASK NOTE TEXT	UJTL_TASK_NOTE_TX	THE TEXT THAT IS A NOTE FOR A SPECIFIC UNIVERSAL-JOINT-TASK-LIST TASK.	TASK Note Text (JCAPS)
UNIVERSAL-JOINT-TASK-LIST-TASK	UNIVERSAL-JOINT-TASK-LIST-TASK REFERENCE SOURCE TEXT	UJTL_TASK_REF_TX	THE SOURCE OF A REFERENCE FOR A SPECIFIC TASK IN THE UNIVERSAL-JOINT-TASK-LIST.	TASK Reference Source Text (JCAPS)
UNIVERSAL-JOINT-TASK-LIST-TASK	UNIVERSAL-JOINT-TASK-LIST-TASK VERSION IDENTIFIER	UJTL_1	THE IDENTIFIER THAT REPRESENTS A SPECIFIC VERSION OF A UNIVERSAL-JOINT-TASK-LIST-TASK.	TASK Version Identifier (JCAPS)
USER CODE	USER_CD	USER_CD		NODE User Code (JCAPS) (domain values)
USER CODE	USER_DESC	USER_DESC		NODE User Code (JCAPS) (definitions of domain values)
USER_DEF_PROP_DICT	PARENT_PROPERTY_ID	PARENT_PROPERTY_ID		PARENT_PROPERTY_ID (JCAPS) in USER-DEFINED-PROPERTY-Dictionary (JCAPS)
USER_DEF_PROP_DICT	PROPERTY_DISPLAY_ORDER	PROPERTY_DISPLAY_ORDER		PROPERTY_DISPLAY_ORDER (JCAPS) in USER-DEFINED-PROPERTY-Dictionary (JCAPS)
USER_DEF_PROP_DICT	PROPERTY_ENUM_ALLOW_NEW	PROPERTY_ENUM_ALLOW_NEW		PROPERTY_ENUM_ALLOW_NEW (JCAPS) in USER-DEFINED-PROPERTY-Dictionary (JCAPS)
USER_DEF_PROP_DICT	PROPERTY_ID	PROPERTY_ID		PROPERTY_ID (JCAPS) in USER-DEFINED-PROPERTY-Dictionary (JCAPS)
USER_DEF_PROP_DICT	PROPERTY_NAME	PROPERTY_NAME		PROPERTY_NAME (JCAPS) in USER-DEFINED-PROPERTY-Dictionary (JCAPS)
USER_DEF_PROP_DICT	PROPERTY_OBJECT_TYPE_PROGID	PROPERTY_OBJECT_TYPE_PROGID		PROPERTY_OBJECT_TYPE_PROGID (JCAPS) in USER-DEFINED-PROPERTY-Dictionary (JCAPS)

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JCAPS Entity Name	JCAPS Attribute Name	JCAPS Col. Nm.	JCAPS Attribute Definition	Supported by IDA Proposed CADM View
USER_DEF_PROP_DI CT	PROPERTY_TYPE	PROPERTY_TYP E		PROPERTY_TYPE {JCAPS} in USER-DEFINED- PROPERTY-Dictionary {JCAPS}
USER_DEF_PROP_DI CT	PROPERTY_VISIBLE	PROPERTY_VISI BLE		PROPERTY_VISIBLE {JCAPS} in USER-DEFINED- PROPERTY-Dictionary {JCAPS}
USER_DEF_PROP_DI CT_ENUMS	ENUM_VALUE	ENUM_VALUE		USER-DEFINED-PROPERTY-Dictionary- ENUMERATION Value Text {JCAPS}
USER_DEF_PROP_DI CT_ENUMS	PROPERTY_ID	PROPERTY_ID		PROPERTY_ID {JCAPS} (FK) in USER-DEFINED- PROPERTY-Dictionary-ENUMERATION {JCAPS}
USER_DEF_PROPS	ARCH_ID	ARCH_ID		ARCHITECTURE Identifier (FK) in USER-DEFINED- PROPERTY {JCAPS}
USER_DEF_PROPS	OBJECT_ID	OBJECT_ID		OBJECT_ID {JCAPS} in USER-DEFINED-PROPERTY {JCAPS}
USER_DEF_PROPS	PROPERTY_ID	PROPERTY_ID		PROPERTY_ID {JCAPS} (FK) in USER-DEFINED- PROPERTY {JCAPS}
USER_DEF_PROPS	PROPERTY_VALUE	PROPERTY_VAL UE		USER-DEFINED-PROPERTY Value Text {JCAPS}
Y2K COMPLIANCE LEVEL CODE	Y2K COMPLIANCE LEVEL CODE	Y2K_COMP_LVL _CD	THE CODE WHICH DENOTES A Y2K COMPLIANCE LEVEL	INTERFACE-TYPE Year 2000 Compliance Level Code {JCAPS}, SOFTWARE-ITEM Year 2000 Compliance Level Code {JCAPS}, and SYSTEM Year 2000 Compliance Level Code {JCAPS} (domain values)
Y2K COMPLIANCE LEVEL CODE	Y2K COMPLIANCE LEVEL CODE DESCRIPTION TEXT	Y2K_COMP_LVL _CD_DTX	THE TEXT WHICH DESCRIBES THE LEVEL OF Y2K COMPLIANCE	INTERFACE-TYPE Year 2000 Compliance Level Code {JCAPS}, SOFTWARE-ITEM Year 2000 Compliance Level Code {JCAPS}, and SYSTEM Year 2000 Compliance Level Code {JCAPS} (definitions of domain values)

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ANNEX G. SUPPORTING ANALYSES PROVIDED TO JCAPS DSWG

A. COMPOSITION AND TASKING FOR DSWG

The Data Standardization Working Group for JCAPS began meeting in August 1999 and has met approximately monthly through the end of 1999. The tasking for the DSWG from the JCAPS Functional Control Board was to address four issues as follows:

- Does JCAPS follow data elements and domain values given in the CADM? If not, what changes need to be made to align it without compromise to user needs?
- What items need to be standardized in JCAPS (e.g., rule, drop down list enforced)?
- For what items should there be a set of policy/procedure guidelines established in lieu of or in addition to rule-based enforcement in the program?
- What will be an acceptable mechanism to promulgate these data standards across the architecture spectrum that is broader than JCAPS (maybe more than C4ISR)?

The DSWG has had representatives from the following Commands/Services/Agencies: USSOCOM, USSTRATCOM, NIMA, Joint Staff, OASD(C3I)-II&I, Army (ODISC4), Navy (SPAWAR), Air Force (38EIW/EST, Tinker AFB), and Joint Battle Center. Support contractors from the following have participated: Silver Bullet, MITRE, LOGICON, SRI, and IDA. Meeting have been held both at IDA and at USSOCOM.

B. ISSUES ADDRESSED BY DSWG

1. Early DSWG Recommendations

Table summarizes the recommendations made by the DSWG to the JCAPS Functional Control Board (FCB) in October 1999.

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Table G-1. DSWG Recommendations to October 1999 JCAPS FCB

Primary Recommendations	
1	Recommend a "prime" data set be developed for JCAPS installation to serve as a common starter set: a. Controlled by codes/flags for each record (e.g., real/notional, generic/specific distinctions; other flags for administrative controls) b. Reviewed for validity (validation status code and date) c. Development of these data sets is a community effort d. DSWG requests FCB members to provide data for developing these data sets e. Candidates data sets: OPFAC, System Template, Organization/Unit, Activity (UJTLs already in the data set; need to add METLs and other "standardized" task lists).
2	Review and expand (pre-defined) drop-down lists in JCAPS (e.g., Echelon). DSWG is developing an improved list for Echelon.
3	Recommend JCAPS use NODE or other entity to represent multiple records of a single and thus avoid unnecessary duplication. An instance of NODE could be created for each of the multiple instances, whose details are captured as characteristics of NODE-ORGANIZATION and NODE-ORG-TYPE. <i>Note: COMMAND-CONTROL-ELEMENT (C2-ELEM, a.k.a. OPFAC) requires a separate instance for each case of representing the end of an IER on a battlefield. (e.g. 3, 6, or 9 Battalion Command Posts)</i>
4	Add the attributes ORG-TYPE to C2-ELEM, since C2-ELEM has a primary role to serve as the sender and recipient for an IER.
5	Information Elements need to be classified (e.g., by subject area). Initially, Data Item Type Code (from the CADM) needs to be added to Information Element. A categorization scheme similar to that used for System Template is being developed by the DSWG. <i>Note: An Information Element is used to represent an information flow, to include inputs, outputs, controls, and mechanisms from an activity model.</i>
6	Develop procedures to avoid multiple spellings of "same" data field input for records in ORG, OPFAC, SYSTEM, TASK, etc. (In progress by DSWG)
7	Provide the capability for a user to "mark for delete" a record of data, an architecture product, and an architecture and a capability for the database manager to purge the system on a periodic basis.
8	Characterize what part of the 2.0 physical schema is visible to 2.0 users (using IDD [integrated data dictionary]). Completed by DSWG in September 1999.
9	Recommend no more than 50 characters (20 desired) for abbreviated names in OPFAC, Organization/Unit, Software Item. An abbreviation name needs to be added for System.
10	Introduce the entity IER-MATRIX in the Physical Schema as in CADM to specific relations of Sending and Receiving Systems as well as Sending and Receiving Organizations for specific realizations (more than one) of an IER. This would avoid creating multiple instances of IER each time one is represented between two nodes.
11	Replace "Sec Class Code" with a references from a new entity (Caveated-Security-Classification as in CADM). This would provide a consistent set of security classification codes, together with the appropriate control and distribution caveat. It would initially apply to Information Element and to IER.
12	Use the values Data, Voice, Video, FAX, Physical, Other, Not Known for Media Code
13	Add two entities (OPER-MSN-THRD and OPER-MSN-THRD-IER from the CADM) with a relationship to IER to enable users to specify sequences of IERs to form a Mission Thread.
14	Re-label Template Name as System Name. <i>Note: System Identification is used to distinguish instances of SYSTEM but only the System Name is shown on the architecture products.</i>
15	Change the IDD and observe the following rules: a. The Country Code selected for each Organization shall be the country where the Organization is assigned. b. The country designated for OPFAC (field is now labeled "Nation") shall be the country of origin. <i>Note: Eventually, the field "Nation" should be replaced by a reference to Country (using the Country drop-down list).</i>
16	Find a means to distinguish generic ("type") records from specific records (of the same "type") currently maintained in OPFAC. Options being evaluated in the DSWG include the following: a. Add a flag or code as an attribute of OPFAC. b. Segregate the OPFAC table (e.g., by moving specific records to the ORG table).
17	Explore the possibility of auto-population to assist in user choice for long list, in combination with a select attribute
Secondary Recommendations	
18	Provide improved capabilities ("smarter queries") as needed to search, retrieve, and select stored instances of large files such as ORG, OPFAC, SYSTEM, etc. Details for recommendations will need to be developed by the DSWG.
19	Explore defining a many-to-many association between UJTL-TASK and PROCESS-ACTIVITY (at present, an "Activity" can represent at most one UJTL-TASK).
20	Add INFO-ELEM-ASSN to JCAPS from CADM to permit the specification of decomposition of Information Elements.
21	Explore the possibility of auto-population to assist in user choice for long list, in combination with a select attribute
22	Specify geographic coordinates for a "real" unit by introducing two entities (ORGANIZATION-POINT and POINT from the Modeling and Simulation extension of the CADM). Multiple instances of location with appropriate effective date and time would thereby be supported. This would replace the OPFAC attributes "Location" and "Geographic Location Latitude-Longitude."

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Table G-1. (Cont'd)

Technical Recommendations	
23	In the future, the entity C2-ELEM possibly becomes ORG-TYPE itself, with distinct subtypes (subsets) for OPFAC, OPER-ELEM, CMD-POST, etc...
24	Suggest JCAPS explore/expand use of NODE, NODE-ASSN, and related entities from CADM (e.g. for NODE-COMM design) and report on planned use of NETWORK and NODE for future.
25	Recommend CADM simplify IER specifications to achieve single primary key identifiers by use of INFO-ELEM to replace IER and rename EXCH-NEED-LINE-IER as IER itself.
26	Coordination for JCAPS users (emails, error reports, physical schema details) may need to be conducted for operational security reasons on a restricted access basis (e.g., password control for unclassified files, migration of all this coordination exclusively to SIPRNET).
27	Explore implementation of one (1) and two (2) character codes for JCAPS (at present, every JCAPS code is defined as 35 characters).
28	Recommend/Consider future use of INT versus 50-character fields for identifiers in JCAPS. Note: The design chosen for replication makes a single field length (50 characters) for identifiers desirable for the present.
Recommended Data Entry Conventions	
29	For data entry in System Template where "Manufacturer Name" is not yet selected or appropriate, enter "Multiple Sources" for this attribute.
30	Observe the following naming conventions: a. Until the attribute "Abbreviation Name" is supported for SYSTEM TEMPLATE, use acronym for (SYSTEM) TEMPLATE Name b. Since many displays are 20 characters, use <u>where possible</u> a name that is unique for the first 20 characters (ORG, OPFAC, SYSTEM Identification, Activity, Info Element)
31	Before creating a record, make a good faith effort to search for an acceptable existing record in any template or element (e.g., For ORG/Unit table go to High-Level Operational Concept graphic and search both Global and private domain) in the database
Future Work for Data Standardization Working Group (DSWG)	
32	Next Meetings (4 Oct 99, 1:00-5:00; and 8-9 Nov 99, 8-4:30 both days) will address the following: a. Effective periods for the assignment of instances of System in node diagrams. b. Communications (links, circuits, channels) c. Networks d. Interfaces e. System and System Template details f. Architecture products g. Resource considerations
33	Add the entity SYSTEM-ORG from the CADM to express multiple relationships between SYSTEM and ORGs.
Key Issues Being Addressed by DSWG	
34	Clarify the distinction between OPFAC and Organization/Unit, to including the following: a. All the units with UIC codes belong in Organization/Unit rather than in OPFAC (verify). b. An OPFAC may serve as a "type" of each instance of Organization/Unit (verify). c. Shall references for "To" and "From" OPFAC in each of the following be expanded to include an independent choice "To" and "From" Organization/Units: IER, Interface, Communication-Link, Communication-Circuit? Further can the OPFAC be blank when Organization is chosen and vice-versa.
35	Is there any way to avoid creating multiple instances of an IER (now also stored in IER) to represent realizations of the IER on the battlefield? <i>Note: Realization have means to depict that an IER is supported and how it is supported in a particular architecture. Note: DSWG is discussing whether a new table (IER)-MATRIX achieves this.</i>
36	Shall ORG/Unit be referenced in Architecture Products (other than HOCG-High Level Operational Concept Graphic and CRC-Command Relationship Chart) rather than relying exclusively OPFAC?

2. Subsequent DSWG Discussions

This section summarizes areas being discussed in the DSWG (specifically at the October 1999 DSWG meeting at USSOCOM).

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a. General Concerns

The following general concerns were discussed without any formal conclusions or recommendations:

- Data stewards and relationships among IERs [JBC]
- Unique identifiers for IERs [JBC] [modified IER spec includes this]
- Who/what is a subject matter expert (SME) [SPAWAR]
- What sources (e.g., DMS) should be used to determine if IER data requirements are still valid [USSTRATCOM]
- What attributes should be mandatory for JCAPS.

b. Communicator

The discussion led by LOGICON reached the notion of “communicator” as the potential end (source, destination) of an IER or need line in an Operational Architecture. Communicator comes in two flavors: instance and type. The concept of OPFAC for JCAPS users should embrace both flavors, even if that term is not longer used.

- The instance flavor would include ORGANIZATION, PERSON, FACILITY, and possibly DUTY-PERSON, together with PLATFORM (the last two not yet defined or structured with attributes). Sources for ORGANIZATION include the UNIT table (more than 50,000 records) in GSORTS (each with a unique UNIT Identification Code). Sources for FACILITY include the Geolocation File used in JOPES (and other systems in GCCS), which also has more than 50,000 records. The Geolocation File includes geographic coordinates (latitude and longitude).
- The type flavor would include ORGANIZATION-TYPE, PERSON-TYPE, FACILITY-TYPE, and possibly DUTY-PERSON-TYPE, together with PLATFORM-TYPE (the last two not yet defined or structured with attributes). Sources for ORGANIZATION-TYPE include the UNIT-TYPE table in GSORTS and the OPFAC, Command-Post, and Command-Post-Cell tables in C4RDP. OCCUPATIONAL-SPECIALTY might be also considered (mentioned but not discussed in detail).
- Ends of links, circuits, and interfaces in JCAPS are current SYSTEM (on the instance side) and SYSTEM-TYPE (on the type side). MATERIEL could be included on the instance side, and MATERIEL-ITEM could be included on the type side.
- An early view generally held was that one or more classes of communicator could be selected for a single IER and that each choice of that class (e.g., ORG or ORG-TYPE) might represent more than one of those, whose composition was expressed in an ORG-ASSN or like entity. Later, the prevailing view was that only one class was appropriate as a communicator (sender or receiver). That is, one should only choose one ORG, FACILITY, or PERSON, or one ORG-TYPE, FACILITY-TYPE, or PERSON-TYPE.

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- LOGICON sketched out several diagrams to illustrate how a Communicator Tool and a Communicator-Type Tool might work.

c. System

System is characterized at three levels of generality in both the JCAPS and the CADM but under different names. (a) SYSTEM-CATEGORY in JCAPS (SYSTEM-TYPE in CADM) provides hierarchical categorization down to the level of information system and C2 information system. (b) SYSTEM-TYPE in JCAPS (SYSTEM in CADM) as something with a prescribed SYSTEM-CATEGORY with attributes characterizing it down to the level of common name, version and release (e.g., AFATDS 2.1, GCCS 2.0, GCCS 2.1). (c) SYSTEM in JCAPS (NODE-SYSTEM in the CADM), down to the level of placing an instance of a SYSTEM at a particular place (node), where SYSTEM has a specific SYSTEM-TYPE and further attributes that are peculiar to its local environment at that place or node.

d. Mission, Threads, and Scenario

A portions of the CADM were presented to show the following:

- MISSION as an independent entity with unique identifier, name, description text, mode code, and type code
- OPERATIONAL-SCENARIO as an independent entity with unique identifier, name, and description text, related to MISSION by a non-identifying relationship (so that an OPERATIONAL-SCENARIO Id occurs in MISSION)
- MISSION-ASSOCIATION relates two missions and identifies some missions as parts of others
- MISSION-TASK identifies which UJTLs, METLs, etc., are related to a specific MISSION (the relationship distinguished by a role code)
- MISSION-ORG identifies which ORGs are assigned to or otherwise related to a specific MISSION (the relationship distinguished by another role code)
- OPERATIONAL-ARCHITECTURE having a non-identifying relationship from MISSION (causing a MISSION Id to occur as an attribute of OPERATIONAL-ARCHITECTURE)
- (Potentially) a relationship from OPERATIONAL-SCENARIO to IER to replace the Scenario (Test) attribute now in JCAPS
- OPERATIONAL-MISSION-THREAD as an independent entity with a unique identifier, security tags, name, and description text that represents a sequence of IERs, each of which is identified (listed) in a separate entity, OPERATIONAL-MISSION-THREAD-IER, the latter having both a sequence number and a transmission processing delay quantity (in seconds). This entity allows sets of IERs to be selected (with some IERs appearing

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in more than one selection), ordered, and arranged to form a meaning “activity” on the battlefield (e.g., represented as a sensor-to-shooter connection).

e. Activity

Four separate and independent entities were described from the DoD Data Model (DoD standards) and the CADM, all of which may have some relevance to JCAPS given the language of the recent CJCSI 6212.01b (draft, 20 October 1999, electronic copy provided on 10 November 1999 to a member of each participant group at the DSWG):

- PROCESS-ACTIVITY (cited twice for an IER—Sender PROCESS-ACTIVITY and Receiver PROCESS-ACTIVITY), which has:
 - Attributes for unique identifier, category code, creation date, definition text, name, scope description text, source document text, validation indicator code, and version identifier
 - Two subtypes in the CADM: SYSTEM-FUNCTION and DATA-STORE (the latter for use in extending activity model entities to be able to specify SYSTEM-FUNCTIONAL-DESCRIPTION (SV-4)
 - User primarily for ACTIVITY-MODEL (OV-5) to capture the processes in the boxes of an IDEF0 model
- TASK, which has:
 - Attributes for unique identifier, category code, command level code (e.g., ST, TA), description text, hierarchy number identifier (e.g., 6.1.3.2.1.1.1), and name
 - Subtypes for MISSION-ESSENTIAL-TASK and (potentially, not in the CADM) UJTL, and C/S/A extensions to the CADM)
 - Used primarily for planning (sequences of tasks, checklists)
- ACTION, which has:
 - Attributes for unique identifier, verb code, start datetime, end datetime, category code, description text, name, priority code, and status code
 - (Potential) subtypes for planned action (the most frequency category) and action event (an unplanned action)
 - Used primarily in operational systems (e.g., JCDB) to carryout plans through operational orders, fire orders, detailed fire plans, movement orders, etc.
- EVENT, which has:
 - Attributes for unique identifier, start datetime, end datetime, description text, and name
 - Used to capture unplanned occurrences (lightning, incoming round, invasion, control line overrun, NBC event)
 - Sometimes used to identify a trigger

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- Other entities were mentioned in connection with CADM support for event trace diagrams, action timelines, and state-transition diagrams.

f. Network

The network concept in the CADM was described as a "cloud" whose character was about what the cloud contained (nodes and links between nodes) and how clouds related to other clouds and nodes. The following entities were included in the diagram used from the CADM 2.0 report (Figures 111, 114, and 115 and pp. 468-492):

- NODE (an independent entity with a category code that includes values for AS--Assessment Node; C2 (BM)--Battle Management Node; CL--Collection Node; CD--Combat Direction Node; CM--Communications Node; EX (Weapon)--Execution Node; PR--Processing Node; PL--Platform; Process Activity; System; System Element; Organization; Person;
- NODE-ASSOCIATION, with a subtype NODE-LINK
- NETWORK (an independent entity)
 - Attributes for unique identifier, security tags, acronym name, description text, estimated users quantity, logical topology name, maximum simultaneous user quantity, maximum throughput rate, name, and implementation type code (with values for Local area network; Metropolitan area network; Wide area network; Telephone network; Telegraph network; Broadcast network; Packet Switching Network; Circuit Switching Network; Message Switching Network; Radio Frequency Network)
 - Relations to other networks through NETWORK-ASSOCIATION
- NETWORK-NODE
 - Identifies which NODEs are included in the NETWORK and their roles
 - Identifies NODEs that represent entire NETWORKs
- NODE-ASSOCIATION-NETWORK, which identifies which NODE-LINKs belong to a network
- NETWORK-STANDARD-PROFILE, which identifies which profiles of standards are supported by the network
- NETWORK-ORG, which identifies ORGs related to the network and their roles
- NETWORK-CAPABILITY, which contains quantitative measures describing the NETWORK
- NETWORK-SYSTEM, which identifies what systems support or are otherwise related to a network (one specific COMMUNICATION-SYSTEM might be selected as characterizing the operation of the network and thereby provide a Comm System SYSTEM Id in the NETWORK entity.

C. PROPOSALS PREPARED WITH THE JCAPS PM FOR EARLY CONSIDERATION IN JCAPS FY2000 DEVELOPMENT

The section provides the final text of a set of proposals developed with the JCAPS PM from the discussions and agreements of the DSWG through December 1999.

The changes below to JCAPS were recommended at the JCAPS Data Standardization Working Group meetings 8-9 November and 7-8 December 1999. Where there are CADM entities, attributes, and values available, these will be used, but values may be extended to address additional needs; expected changes to the CADM are incorporated below. Once cost, schedule and certification and accreditation impacts are known, the JCAPS Program Manager will make a decision on what changes can be implemented and on what schedule.

1. ORG/UNIT (Organization/Unit)

- a. This entity will represent instances of organizations and units. [Consideration should be given to have the tool design also support instances of other type classes (e.g., PLATFORM {ship, aircraft, or vehicle},¹³ PERSON, FACILITY).]
- b. It will have the capability to store latitude and longitude information, as well as measured elevation, on each ORG/Unit and then use it to display the location on a map at different scales. For the short term this could be specified as three attributes of ORG/Unit; however, if possible, the entities POINT, MEASURED-ELEVATION-POINT and POINT-LOCATION should be used (see diagram attached).
- c. It will be designed to permit drill-down from one ORG/Unit (subordinate and ordinate) to another. This should be accomplished by creating and reviewing instances of ORGANIZATION-ASSOCIATION with the proper instances of ORG-ASSN Reason Code.
- d. It will be capable of being the end-point of an IER, Needline, or other future connection and shall be displayable in the workspace.
- e. System-types and system instances may be associated to an ORG/Unit.
- f. The attributes must track with the CADM, but may be more extensive.
- g. The UIC should be an attribute.

¹³ In Framework 2.0, a platform is specified as a System. In the CADM, the SYSTEM Category Code can be "System Element," and one of the SYSTEM-ELEMENT Category Codes is "Platform Element." CADM 2.0 has the following values of MATERIEL-ITEM Type Code: 01 = Vehicle Type; 02 = Weapon Type; 04 = Sensor Type; 05 = Aircraft Type; 12 = Equipment Type; 17 = Ship Type; and 18 = Platform (not otherwise specified).

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2. OPFAC

- a. This entity and its tables will be replaced. See NODE and the separation of ORG-TYPE from ORG.

3. ORGANIZATION-TYPE

- a. This entity will represent instances of *classes* of organizations. [Consideration should be given to have the tool design also support instances of other type classes (e.g., PLATFORM-TYPE {ship type, aircraft type, vehicle type}, PERSON-TYPE, FACILITY-TYPE)].
- b. It will be designed to permit drill-down from one ORG-TYPE to another. This should be accomplished by creating and reviewing instances of ORGANIZATION-TYPE-ASSOCIATION with the proper instances of ORG-TYPE-ASSN Type Code.
- c. The Unit Type Code (UTC) from GSORTS shall be an attribute for ORG-TYPE.
- d. Attributes will be realigned to Organization-Type, per the attached diagram. The attributes for a type must track with the CADM, but may be more extensive.
- e. It will also be capable of being the end-point of an IER, Needline, or other future connection and shall be displayable in the workspace.
- f. System-Type or System instances may be associated to an ORG-TYPE with display capability through use of a common NODE.

4. NODE

- a. This entity will represent an element of architecture that produces, consumes, or processes data (from CADM 2.0).
- b. What a NODE represents will be determined by how the following associations are populated: NODE-ORGANIZATION, NODE-ORGANIZATION-TYPE, NODE-SYSTEM, etc. The NODE in these associations provides a concept of location in a diagram and by assigning an ORG-TYPE to several nodes enables instances of ORG-TYPE to be denoted on a diagram without otherwise creating multiple instances of it in another table (formerly done using the C2-ELEMENT or OPFAC table).
- c. An operational node will be either a NODE-ORGANIZATION or a NODE-ORGANIZATION-TYPE. The concept of operational node might be expanded to include associations of NODE with PLATFORM, FACILITY, etc. (known in DSWG discussions as communicators) and to include associations of NODE with PLATFORM-TYPE, FACILITY-TYPE, etc. (known in DSWG discussions as communicator types).
- d. A NODE may participate in a NETWORK and may be the endpoint of a circuit or link.

5. INFORMATION EXCHANGE REQUIREMENT (IER)

- a. Each IER has a unique identifier.
- b. By reference, each IER cites an instance of INFO-ELEM (currently the union of two CADM entities, INFO-REQ and INFO-ELEM) by which the content of the IER is described. Such reference provides the following information for the IER
 - (1) INFO-ELEM Name
 - (2) INFO-ELEM Description (a.k.a. "characterization").
- c. By reference, each IER cites an instance of EXCH-NEED-LINE-REQ.
- d. Each IER cites (directly as is the case in JCAPS now) or indirectly using the citation of an EXCH-NEED-LINE-REQ as in the CADM) the following, by which the source and destination of the IER is described:
 - (1) Sending/Source ORG or Sending/Source ORG-TYPE (or other sending/source communicator or communicator type, where exclusive "or" is intended—exactly one of these)
 - (2) Receiving/Destination ORG or Receiving/Destination ORG-TYPE (or other receiving/destination communicator or communicator type, where exclusive "or" is intended—exactly one of these).
- e. By reference, each IER may cite one or more of the following:
 - (1) Source and Destination PROCESS-ACTIVITY
 - (2) Source and Destination TASK (which may be an instance of the UJTL); reference to the TASK can be achieved through the support PROCESS-ACTIVITY (as is done currently in JCAPS) or directly through TASK (as is done in the CADM)
 - (3) Resourcing ORG/Unit for the Source ORG or Source ORG-TYPE
 - (4) Resourcing ORG/Unit for the Destination ORG or Destination ORG-TYPE.
- f. IER has attributes for the following [to support NETWARS and the CJCSI 6212.01B (Rev 2, 20 Oct 99) specification of IER]:
 - (1) Action Description (rename "Remarks" to "Action Description/Remarks"); this may be pulled from the Definition Text for the Source PROCESS-ACTIVITY or by introducing the attribute IER Trigger Text from the CADM
 - (2) Criticality (use Cost-of-Failure Code from CADM with amended values: A = Mission Failure; B = Task Failure; C = Loss of Life; D = Minimal Impact)
 - (3) Sending Service (Add to IER; pull from the ORG-TYPE Service Code values—10 (Joint), 01 (Army), 02 (Navy), 04 (Marines); 03 (Air Force); 27 (Coast Guard); 11 (Allies); 12 (DoD Agency); 13 (Department of State); 14 (Other Federal Government); 15 (NGO/PVO); and 16 = (Other Civilian)—for the ORG-TYPE of the Source ORG/Unit or for the Source ORG-TYPE)
 - (4) Receiving Service (Add to IER; pull from the ORG-TYPE Service Code values—10 (Joint), 01 (Army), 02 (Navy), 04 (Marines); 03 (Air Force); 27 (Coast Guard); 11 (Allies); 12 (DoD Agency); 13 (Department of State); 14 (Other Federal

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Government); 15 (NGO/PVO); and 16 = (Other Civilian)—for the ORG-TYPE of the Source ORG/Unit or for the Source ORG-TYPE)

- (5) Media (remove from INFO-ELEM and add Media Code to IER with amended values from CADM: 1--Audio, 2--Text, 3--Graphics, 4--Still Imagery, 5--Stop Motion Imagery, 6--Full Motion Imagery, 7--Data; 8--Film; 9--Paper; 10--Magnetic Tape; 11--Optical Disk; 12--Magnetic Disk; 98--Not specified; 99--Not known.)
- (6) Perishability (add to IER with codes: B--4 - 8 hours; C--3 - 4 hours; D--2 - 3 hours; E--1 - 2 hours; F--10 - 60 minutes; G--1 - 10 minutes; H--25 - 59 seconds; J--11 - 24 seconds; K--5 - 10 seconds; L--1 - 4 seconds; M-- Less than 1 second; N--Not specified; X--Not known; T = >360 days; U = 180-360 days; V = 90-180 days; W = 30-90 days; X = 10-30 days; Y = 3-10 days; Z = 1-3 days; A = 8-24 hours)
- (7) Frequency
 - Add Frequency Quantity (number per period)
 - Add Time Period Code 01--One second; 02--One minute; 03--One hour; 04--24 hours; 05--One week; 06--One month; 07--One year; 08--More than one year; 09--Event driven; 10--As required; 11--Locally determined; 98--Not specified; 99--Not known.
- (8) Classification (use a reference from CAVEATED-SECURITY-CLASSIFICATION as in the CADM, which provides separate entities for classification codes and for caveats such as None, FOUO For Official Use Only), PROPIN (Proprietary Information), REL TO US (Releasable to US); ORCON (Originator controlled); FRD (Formerly Restricted Data), RD (Restricted Data), and SPECAT (Special Category). Implement SECURITY-ACCESS-COMPARTMENT table relationship along with CAVEATED-SECURITY-CLASSIFICATION table.
- (9) Size
 - Add Graphic Page Quantity (number of pages)
 - Add Imagery Pixel Quantity (number of pixels)
 - Add Imagery Pixel Depth Quantity (number of bits for each pixel)
 - Add Product Data Size Quantity (bits)
 - Add Voice/Video Duration Quantity (seconds) (store in seconds; display in minutes or seconds)
- (10) Accuracy (text).
- (11) Authoritative Source (for the short term, add to DOCUMENT the attributes Title, Author, Date, and Classification, together with a relationship from DOCUMENT to IER; for the long term, use CADM entity GUIDANCE-DOCUMENT instead of the direct relationship to permit more than one source)
- (12) POC (for the short term, pull from General Tab: Last Name, First Name, Tel, Email; for the long-term, introduce the entity POINT-OF-CONTACT from the CADM and a relationship from POC to IER)
- (13) Precedence (add to Precedence Code to IER from CADM, with domain values R--Routine; P--Priority; O--Immediate; Z--Flash; Y--Flash Override)

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(14) Mission Name (add to IER) (allow growth for Mission entity to include Mode, Type, and Mission-Area type, Mission-Task, Operational-Scenario and Mission Requirement).

6. INFORMATION ELEMENT

- a. Note changes above.
- b. Timeliness [pull from INFO-ELEM with codes as in CADM: RT--Real-Time; NRT--Near-Real-Time (< 1 sec); M--Moderate (1-10 sec); S--Slow (10 s - 10 m); VS-- Very Slow (>10 min); 1H (10 min – 1 hr); 8H (1 hr – 8 hr); 1D (8 hr – 24 hrs); 1M (1 day – 30 days); LG (Greater than 30 days)].

7. PROCESS-ACTIVITY and UJTL

- a. Change “UJTL Task” To “Task” and broaden to also include METLs, NTAs, etc.
- b. Make the relationship from TASK to PROCESS-ACTIVITY “is supported by” and include the Support TASK Identifier (FK) as an attribute of PROCESS-ACTIVITY.
- c. Maintain distinct names for PROCESS-ACTIVITY and the Supported TASK.

8. SYSTEM-TYPE and SYSTEM

- a. Permit System-Types to be at a NODE
- b. Permit System to be at a NODE
- c. Consider restructuring “System” to become “NODE-SYSTEM” as in the CADM with additional attributes from the CADM
- d. Consider restructuring “System Type” to become “SYSTEM” as in the CADM with additional attributes from the CADM
- e. Consider restructuring “System Category” to become “SYSTEM-TYPE” as in the CADM with the addition of “Description Text” from the CADM

9. OPERATIONAL-MISSION-THREAD

- a. Consider showing the operational mission thread for a selected group of IERs.
- b. Consider introducing from the CADM the entities OPERATIONAL-MISSION-THREAD and OPERATIONAL-MISSION-THREAD-ELEMENT (the latter cites IER).
- c. Consider incorporating tables even if not implemented to Presentation level.

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10. MATERIAL-ITEM and MATERIAL

- a. Investigate addition of these entities
- b. Consider introducing a “may be a” relationship from MATERIEL-ITEM to SYSTEM-TYPE and another from MATERIEL to SYSTEM.

MODIFIED JCAPS PROTOTYPE 2.0 PHYSICAL SCHEMA

Provided by LOGICON, 2 August 1999
Modified by IDA for DSWG, 15 Dec 99

Color Key:
 Not seen by user
 Seen by user, DoD standard
 Seen by user, C4DM 2.0
 Created for JCPS
 New for JCPS

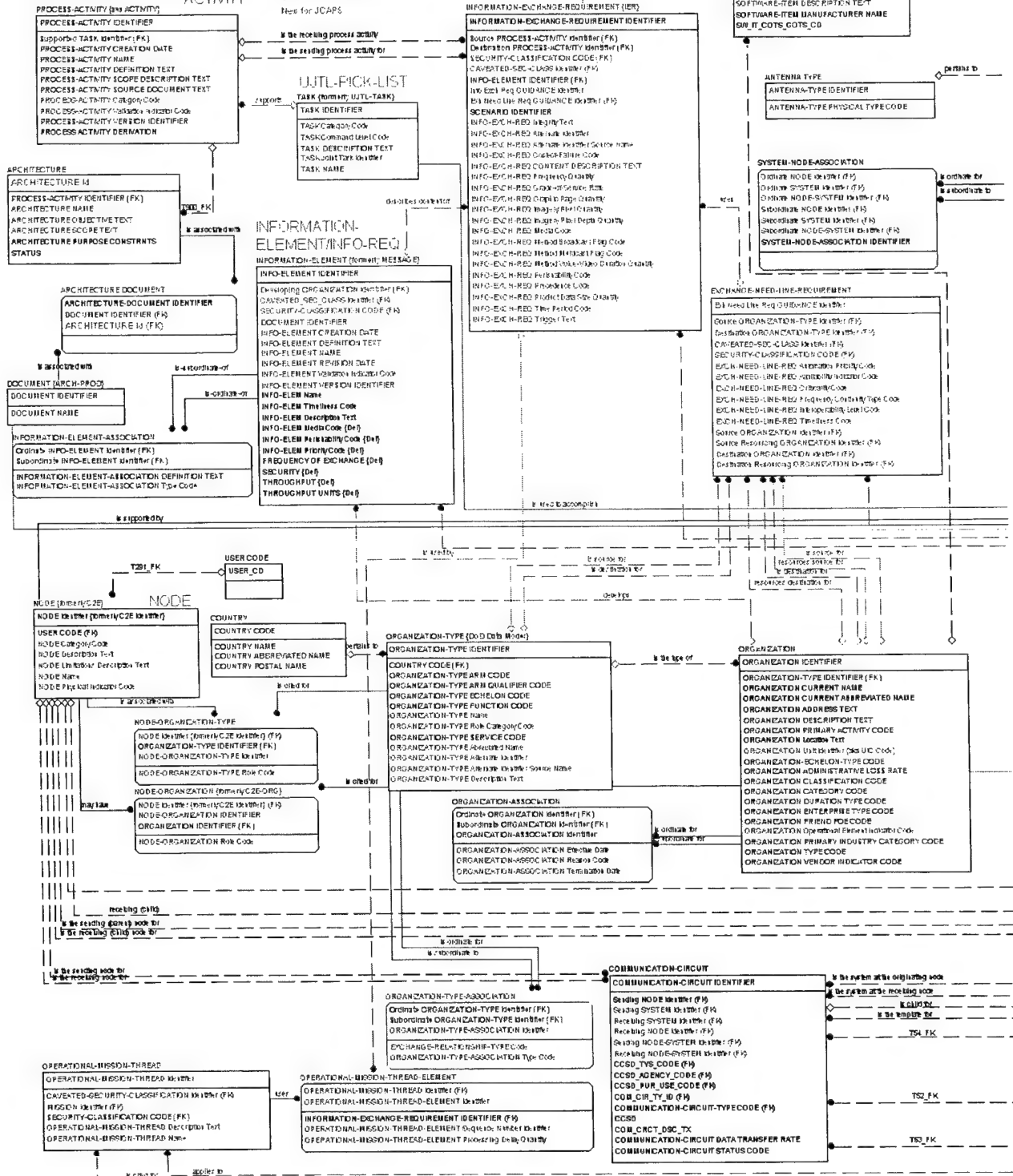


Figure G-1. Proposed Modification to JCAPS Physical Schema (User-Accessible Portion)

Figure G-1. (Cont'd)



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D. ISSUES REMAINING FOR WORK IN 2000

Table G-2 lists the short-term issues identified during comments provided to the JCAPS Program Manager in December 1999.

Table G-2. Short-Term Issues for DSWG

Ref	Subject Area	Issue/Comment	Source	Options for Resolution
1	CIRCUIT, LINK	Not yet adequately discussed in the DSWG; changes are therefore premature	NIMA (12/21)	Further discussion in DSWG is needed
2	Echelon	Echelon not yet adequately addressed in DSWG	USSOCOM (12/20)	Current proposals suggest echelon be removed as an entity and replaced by ORG-TYPE Echelon Code (already in data model); further discussion required
3	Entire Model	Explain the effect of citing one entity by second entity (through a non-identifying relationship), specifically if all the attributes of the first should be copied into the second	NIMA (12/21)	Further discussion in DSWG is needed; copying such attributes is for the physical schema only and justified only to avoid dynamic joins (database efficiency)
4	Entire Model	Explain whether "rollups" can be mandatory or derived from a set of attributes	NIMA (12/21)	Further discussion in DSWG is needed; any set of attributes of an entity can be used as a query to create a "roll up" (but this does not mean that there will not lots of instances with the same values for those specific attributes.
5	IER	Sending Service, Receiving Service	MITRE (12/22)	Not attributes of IER; rather they are derived from the ORG and/or ORG-TYPEs cited in the IER
6	IERs	Clarify what makes an IER different from another instance of IER	NIMA (12/21)	In general, this is up to the user and creators of instances for the database. IERs can and will exist that share many of the same properties (values of descriptive attributes).
7	INFO-ELEMENT	Very Slow (as a domain value for Timeliness) should be removed NB: Value is mandated by CJCSI 6212.01b	NIMA (12/21)	VS does overlap other values but I recommend retaining it since it is (at least currently) cited in CJCSI 6212.01b
8	MATERIEL	Not yet adequately discussed in the DSWG; changes are therefore premature	NIMA (12/21)	Further discussion in DSWG is needed; this minimum relationship was discussed at the USSOCOM meeting
9	MATERIEL-ITEM	Not yet adequately discussed in the DSWG; changes are therefore premature	NIMA (12/21)	Further discussion in DSWG is needed; this minimum relationship was discussed at the USSOCOM meeting
10	NODE	Clarify whether and how NODE is related to LOCATION (lat/long).	NIMA (12/21)	At present, NODE is not assigned a latitude or longitude, so that NODE distinguishes only in a non-geographic sense "where" something "is" (location on a diagram)
11	NODE	Clarify whether the "concept of location" implied by use of NODE can be applied to ORG-TYPE and to SYS-TYPE	NIMA (12/21)	NODE-ORGANIZATION-TYPE assigns one or more NODEs to an ORGANIZATION-TYPE (usually with different roles)
12	NODE-ORGANIZATION	Clarify whether we can (and should) enforce a rule that a NODE will point to one and only one ORGANIZATION	NIMA (12/21)	Any such business rule should be enforced by the user for those architectures for which this rule is needed
13	NODE-SYSTEM	Clarify whether a direct relationship SYSTEM-ORGANIZATION is needed, specifically to specify exactly what systems are deployed to what organization and when	NIMA (12/21)	SYSTEM-ORGANIZATION is already defined in the CADM

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Table G-2. (Cont'd)

14	Relationships among organizations and organization-types	There is a requirement to specify effective start date and effective end date for relationships between orgs, org-types.	NIMA (12/21)	Effective date and termination date are already attributes of ORG-ASSOCIATION; they could be added to ORG-TYPE-ASSOCIATION, also relationships at the TYPE level are not commonly dynamical but rather fixed by doctrine or JTF planning throughout an architecture
15	SYSTEM	Clarify whether and how a specific SYSTEM is related to LOCATION (lat/long).	NIMA (12/21)	At present, a specific instance of SYSTEM (i.e., a SYSTEM-NODE) is specified geographically by the location of the ORGANIZATION or FACILITY to which it is assigned; SYSTEM and SYSTEM-TYPE are not directed tied to LOCATION to have geographic coordinates assigned
16	SYSTEM-ORGANIZATION	Provide a direct association between SYSTEM and ORGANIZATION	USSOCOM (12/20)	Currently defined in the CADM
17	SYSTEM-TYPE	Assess whether direct relationships are needed between SYSTEM-TEM and ORGANIZATION-TYPE	USSOCOM (12/20)	Probably not needed; discussion required

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APPENDIX H. ANALYSIS OF IER DATA REQUIREMENTS

A. BACKGROUND

During the past 3 years, joint specification and development of NETWARS has led to clarification and focus of the underlying data requirements for modeling and simulation (M&S). This paper identifies the data requirements underlying NETWARS, which are almost entirely focused on the specification of information exchange requirements (IERs),¹⁴ and describes how these requirements are support in each of the following activities:

- Current development of NETWARS
- Version 2.0 of the C4ISR Core Architecture Data Model (CADM)
- Prototype 2.0 of the Joint C4ISR Architecture Planning/Analysis System (JCAPS)
- Army Extension to the CADM for the Army Systems Architecture Data Model, which now integrates the entirety of the C4RDP, Army Operational Architecture Repository, Army Operational Architecture data models, and base infrastructure information.

The next section (Section IV.B) characterizes the most recent specifications of IERs, drawn from a new draft Chairman, Joint Chiefs of Staff Instruction (CJCSI). Section IV.C characterizes the current data requirements for NETWARS for modeling and simulation—these requirements are exclusively in the area of IERs since NETWARS database is (at least at present) exclusively focused on IERs. CADM support for modeling and simulation (taken from the CADM 2.0 report) is summarized in Section IV.D.

B. IER DATA REQUIREMENTS FROM DRAFT CJCSI 6212.01B

In October 1999, the Joint Staff issued a revised draft instruction, CJCSI 6212.01B (Rev 2, 20 October 1999), that provides detailed IER data fields and associates to each field a characterization of when that field is mandatory for use in Mission Need Statements (MNSs), Operational Requirements Documents (ORDs), Capstone Requirements Documents (CRDs), and C4I Support Plans (C4ISPs). An analysis of these data requirements was conducted to determine

¹⁴ The contractor (SRI International) and the program manager (at Joint Staff J6I) have stated that the IER database described below is the only database currently in development for NETWARS (Private Communication, September 1999).

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what extensions to the CADM are necessary to capture each field and each domain and to provide recommendations to the JCAPS Program Manager and other implementors for extending and modifying existing physical schema.

Table H-1 provides the specification of each of the 21 fields identified in draft CJCSI 6212.01B, including the materiel in the text (datatype, field definition, and field examples) and in the IER Matrix provided in that document (IER Matrix Description). The following are the most significant aspects of the draft CJCSI 6212.01B specification of IERs:

- Fourteen of the 21 fields are specified as free text, allowing any relevant text to describe the IER property.
- Some of the definitions are unclear, especially for Event and for Action Description (in the analysis below, it is assumed that the Action Description of Field 2 is the descriptive text for the Event of Field 1 and that both can be represented by the Source PROCESS-ACTIVITY (e.g., the beginning end of an information flow in an activity model from which the information is initiated).
- Either or both the Sending Organization Node and Receiving Organization Node (also known as “operational” nodes, Fields 5 and 6) may be a specific ORGANIZATION (e.g., JICPAC). The most common types of Sending and Receiving nodes are ORGANIZATION-TYPES (e.g., JTF JOC, JFLCC, JAOC) for IERs, which enables the IER to be seen as a requirement that generalizes or otherwise applies to every organization of that type. This requires new relationships in the CADM and new attributes for EXCHANGE-NEED-LINE-REQUIREMENT.
- Either or both the Sending Organization Node and Receiving Organization Node may have explicitly identified in the IER a “resourcing” ORGANIZATION (Fields 9 and 10). This also requires new relationships in the CADM and new attributes for EXCHANGE-NEED-LINE-REQUIREMENT.
- The definition of accuracy is vague; when clarified, there is probably a need for a text field to capture this information (a percent probably cannot be unambiguously defined and identifying reasonable coded or other values has so far been unsuccessful).
- Point of contact (Field 21) for each IER is new for most databases. Since POINT-OF-CONTACT is already in the CADM and since many types of requirements and other guidance may have a point of contact, a new relationship from POC to GUIDANCE is needed for the CADM.

The last (right-hand) column identifies the data elements of the CADM that are recommended for use in meeting the data requirements of draft CJCSI 6212.01B. Those recommendations in bold font represent new attributes for the CADM (not in CADM 2.0). Figure H-1 is a data model diagram showing how the new requirements can be embedded in CADM 2.0 (those attributes supporting CJCSI 6212.01B are highlighted with the pound sign (#)).

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Table H-1. Relation of CADM to CJCSI 6212.01B (Rev 2, 20 Oct 99) Specification of IER Fields and IER Matrix

No	Mand/Optional for CRDs	Field Name	Data Type	Field Definition	Field Examples	IER Matrix Description	Relation to CADM (bold font is a change)
1	Mandatory for CRDs	Event	Free Text	The action that causes the Information Exchange to be initiated.	Target Request; Track Update; Data Request; Track Automatic Update; etc.	Event that produces IER	PROCESS-ACTIVITY Name for the Source PROCESS-ACTIVITY Name (FK) in INFORMATION-EXCHANGE-REQUIREMENT (formerly EXCH-NEED-LINE-IER in CADM 2.0)
2	Mandatory for CRDs	Action Description	Free Text	A brief text description of the action that initiates the information exchange. This description is designed to help the user understand the activities that produce and/or use the information, and relate the information to the operational scenario in a way that can be used to analyze the impact of the information on the scenario.	"All tracks are automatically updated every 15 seconds (based upon radar sweep rate)"	Brief description of scenario event that produces IER	PROCESS-ACTIVITY Definition Text ¹⁶ for the Source PROCESS-ACTIVITY Identifier (FK) in INFORMATION-EXCHANGE-REQUIREMENT
3	Mandatory for CRDs	Info Element	Free Text	Name of the information element being sent. An information element is a specific information product with detailed characteristics or attributes. In most instances it is not a generic type of information or broad information category.	Track report, Proposed Course of Action, Image of Intermediate Staging Base, Weather Report, Situation Report, Intelligence Summary, Report of Refugee Movement, etc.	Intelligence Report NGO/PVO SITREP Airlift FRAGO Weather Report Evacuation List Update etc.	INFORMATION-ELEMENT Name for the INFORMATION-ELEMENT Identifier (FK) in INFORMATION-REQUIREMENT (formerly INFO-EXCH-REQ in CADM 2.0) for the Info Req GUIDANCE Identifier (FK) in INFORMATION-EXCHANGE-REQUIREMENT (if the INFORMATION-ELEMENT Identifier corresponds to a set of information elements, those information elements are associated to the INFORMATION-ELEMENT Identifier in INFORMATION-ELEMENT-ASSOCIATION)

¹⁵ In an activity model, the Source PROCESS-ACTIVITY of each information flow is the parent that prepares information for exchange. A different specification would be required if the "event" is a trigger (suggesting use of DoD-approved EVENT) of if the "action that causes" is a separate ACTION, PROCESS-ACTIVITY, or TASK.

¹⁶ This assumes that the Source PROCESS-ACTIVITY of Field 1 is being described in Field 2. A complete specification of all the information contained in the Field 2 Definition would entail references to OPERATIONAL-SCENARIO, CONDITION, OPERATIONAL-SCENARIO-CONDITION, OPERATIONAL-RULE (and perhaps MISSION-TASK-CONDITION) from CADM 0.

H-3

Annex H

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IER Data Requirements

Table H-1. (Cont'd)

No	Mand/ Optional for CRDs	Field Name	Data Type	Field Definition	Field Examples	IER Matrix Description of information element(s)	Relation to CADM (bold font is a change)
4	Mandatory for CRDs	Characterization	Free Text	Brief text description of the information element, including the range of information and precision.	"Track course – 0-360° ±0°. Track speed – knots ±0 knots, Track altitude – feet ±0."	Brief description of information element(s)	INFORMATION-ELEMENT Definition Text for the INFORMATION-ELEMENT Identifier (FK) in INFORMATION-REQUIREMENT for the Info Req GUIDANCE Identifier (FK) in INFORMATION-EXCHANGE-REQUIREMENT
5	Mandatory for CRDs	Sending Organizational Node	Free Text	Name of the Operational Node that sends the information element. An Operational Node is a group of people working together to achieve a common objective in support of the mission/scenario under consideration. An Operational Node performs activities shown in the activity model (a supporting operational architecture Product per reference q), and receives, processes, and sends information elements.	JICPAC, JTF JOC, JFLCC, JAOC, etc.	JICPAC JTF JISE BLT CP etc.	ORGANIZATION-NAME Text for the Source ORGANIZATION Identifier (FK) or the ORGANIZATION-TYPE Name for the Source ORGANIZATION-TYPE Identifier (FK) in EXCHANGE-NEED-LINE-REQUIREMENT for the Exch Need Line Req GUIDANCE Identifier (FK) in INFORMATION-EXCHANGE-REQUIREMENT
6	Mandatory for CRDs	Receiving Organizational Node	Free Text	Name of the Organizational Node that receives the information element. An Organizational Node is a group of people working together to achieve a common objective in support of the mission/scenario under consideration. An Organizational Node performs activities shown in the activity model (a supporting operational architecture Product per reference q), and receives, processes, and sends information elements.	JICPAC, JTF JOC, JFLCC, JAOC, etc.	JICPAC JTF JISE BLT CP etc.	ORGANIZATION-NAME Text for the Destination ORGANIZATION Identifier (FK) or the ORGANIZATION-TYPE Name for the Destination ORGANIZATION-TYPE Identifier (FK) in EXCHANGE-NEED-LINE-REQUIREMENT for the Exch Need Line Req GUIDANCE Identifier (FK) in INFORMATION-EXCHANGE-REQUIREMENT
7	Mandatory for CRDs	UJTL #	Pick List	Warfighting and warfighter support missions described in the current Universal Joint Task List (UJTL) (CJCSM 3500.04B, 1 Oct 99) that this Information Element supports.	TA 3.2.7	UJTL #'s (from CJCM 3500.04B, 1 Oct 99) that this information element supports.	Task Name, TASK Command Level Code, and TASK Hierarchy Number Identifier for the Destination TASK Identifier (FK) in INFORMATION-EXCHANGE-REQUIREMENT (if the TASK Identifier corresponds to a set of UJTLs, those UJTLs are associated to the TASK Identifier in TASK-ASSOCIATION)

Table H-1. (Cont'd)

No	Mand/ Optional	Field Name	Data Type	Field Definition	Field Examples	IER Matrix Description	Relation to CADM (bold font is a change)
8	Mandatory for CRDs	Criticality	Pick List	This indicates what might happen should the User not receive the information in the time required. This often requires a judgment call. While there may be cases where failure to receive routine information might result in mission failure, this is generally not the case.	Pick list containing the following values: A- Mission Failure; B-Loss of Life; C-Task Failure; D-Minimal Impact	Indicates what might happen should the User not receive the information in the time required. A-Mission Failure B-Loss of Life C-Task Failure D-Minimal Impact	INFORMATION-EXCHANGE- REQUIREMENT Cost-of-Failure Code (domain would be changed from the following: I— Indispensable; C—Critical; E— Essential. Source: U.S. Army C4RDP. Added for CADM 2.0: X— Not known. . Revised for Army Integrated Model: A = Mission Failure; B = Task Failure; C = Loss of Life; D = Minimal Impact; I = Indispensable (Obsolete Code); R = Critical (Obsolete Code); E = Essential (Obsolete Code).
9	Optional	Sending Unit/Org	Free Text	Official designation of the primary unit/organization that provides the resources, administrative and logistics support, and policy and guidance (but usually not operational direction) for the sending Operational Node. In some cases, an Operational Node and its unit/organization may be the same.	PACOM, CTF 76, 31 st MEU(SOC), 18 th Wing, etc.	PACOM CTF 76 BLT/31 MEU etc.	ORGANIZATION-NAME Text for the Source Parent ORGANIZATION Identifier (FK) in EXCHANGE-NEED-LINE- REQUIREMENT for the Exch Need Line Req GUIDANCE Identifier (FK) in INFORMATION-EXCHANGE- REQUIREMENT

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Table H-1. (Cont'd)

No	Mand/ Optional	Field Name	Data Type	Field Definition	Field Examples	IER Matrix Description	Relation to CADM (bold font is a change)
10	Optional	Receiving Unit/Org	Free Text	Official designation of the primary unit/organization that provides the resources, administrative and logistics support, and policy and guidance (but usually not operational direction) for the receiving Operational Node. In some cases, an Operational Node and its unit/organization may be the same.	PACOM, CTF 76, 31 st MEU(SOC), 18 th Wing, etc.	PACOM CTF 76 BLT/31 MEU etc.	ORGANIZATION-NAME Text for the Destination Parent ORGANIZATION Identifier (FK) in EXCHANGE-NEED-LINE-REQUIREMENT for the Exch Need Line Req GUIDANCE Identifier (FK) in INFORMATION-EXCHANGE-REQUIREMENT
11	Mandatory for ¹⁷ ORDs	Sending Service	Pick List	Service to which the sending Operational Node belongs.	Joint, Army, Navy, Marine Corps, Air Force, Coast Guard, Allies, DoD Agency, Other Dept of State, Other Federal Govt. Agency, Non-Government Organization (NGO)/Private Volunteer Organization (PVO), Other Civilian	Joint Army Navy Marine Corps Air Force Coast Guard Allies DoD Agency Dept of State Other Fed Govt NGO/PVO Other Civilian	ORGANIZATION-TYPE Service Code for the Source ORGANIZATION-TYPE Identifier (FK) in EXCHANGE-NEED-LINE-REQUIREMENT or for the "is the type of" ORGANIZATION-TYPE Identifier in ORGANIZATION for the Source ORGANIZATION Identifier (FK) in EXCHANGE-NEED-LINE-REQUIREMENT
12	Mandatory for ORDs	Receiving Service	Pick List	Service to which the receiving Operational Node belongs	Pick list containing the following values: Joint, Army, Navy, Marine Corps, Air Force, Coast Guard, Allies, DoD Agency, Dept of State, Other Federal Govt. Agency, NGO/PVO, Other Civilian	Joint Army Navy Marine Corps Air Force Coast Guard DoD Agency Dept of State Other Fed Govt NGO/PVO Other Civilian	ORGANIZATION-TYPE Service Code ¹⁸ for the Destination ORGANIZATION-TYPE Identifier (FK) in EXCHANGE-NEED-LINE-REQUIREMENT or for the "is the type of" ORGANIZATION-TYPE Identifier in ORGANIZATION for the Destination ORGANIZATION Identifier (FK) in EXCHANGE-NEED-LINE-REQUIREMENT

¹⁷ Missing data fields will result in a critical comment to correct the deficiency; if the field is not applicable it must be so annotated.

¹⁸ DoD Approved (DDDS, September 1999): 01 = ARMY; 02 = NAVY; 03 = AIR FORCE; 04 = MARINES; 05 = CIVILIAN/GOVERNMENT; 06 = CIVILIAN/NON-GOVERNMENT; 07 = ARMED FORCES; 08 = NATIONAL GUARD; 09 = OTHER DOD; 96 = OTHER; 98 = NOT FURTHER SPECIFIED; 99 = NOT KNOWN.

CADM 2.0 (December 1998) proposed the following additional values: 21--Army Reserve; 22--Army National Guard; 23--Navy Reserve; 24--Marine Corps Reserve; 25--Air Force Reserve; 26--Air National Guard; 27--Coast Guard; 28--Coast Guard Reserve; 29--Civilian DoD; 30: Civilian Non-DoD/Government; 80--Multinational (added for CADM 2.0). CADM 2.0 recommends the following values be deleted when and if the recommended values are adopted: 05 (Civilian/Government) and 08 (National Guard). The new values permit the identification of reserve types of units, distinguishing between Army National Guard and Air National Guard types of units, and distinguishing the class of DoD Civilian units. [2-character (max) string]

Table H-1. (Cont'd)

No	Mand/ Optional	Field Name	Data Type	Field Definition	Field Examples	IER Matrix Description	Relation to CADM (bold font is a change)
13	Mandatory for ORDs	Format	Pick List	Format of the information element. Media is the physical form of the information element, not the communications medium used to send the information.	Pick list containing the following values: Audio, Text, Graphics, Still Imagery, Stop Motion Imagery, Full Motion Imagery, Data.	Media Audio Text Graphic Imagery Still Stop Motion Full Motion Data	INFO-EXCH-REQ Information ¹⁹ Class Code with domain as follows: 01 = Audio; 02 = Text; 03 = Graphic (to include facsimile); 04 = Imagery not otherwise specified; 05 = Imagery, Still; 06 = Imagery, Stop Motion; 07 = Imagery Full Motion; 08 = Data not otherwise specified; 09 = Data, ASCII; 10 = Data, bit-oriented; 98 = Not specified; 99 = Not known.

Support for CJCSI 6212.01B (Ref 2, 20 Oct 99) requires the following changes: 10 = Joint; 11 = Allies; 12 = DoD Agency; 13 = Department of State; 14 = Other Federal Government; 15 = Non-Government Organization (NGO)/Private Volunteer Organization (PVO); 16 = Other Civilian (omitting values 05, 06, 07, 29, and 30, and change the name for 80 to "Multinational other than Allies."

For the CJCSI 6212.01B IER Matrix, the following Service codes would be permitted: 10 (Joint), 01 (Army), 02 (Navy), 04 (Marines); 03 (Air Force); 27 (Coast Guard); 11 (Allies); 12 (DoD Agency); 13 (Department of State); 14 (Other Federal Government); 15 (NGO/PVO); and 16 = (Other Civilian).

¹⁹ The new attribute INFORMATION-EXCHANGE-REQUIREMENT Information Class Code would be defined by: The code that represents the type of format of the information element for a specific INFORMATION-EXCHANGE-REQUIREMENT.

²⁰ Domain values for CADM 2.0's INFORMATION-EXCHANGE-REQUIREMENT Information Class Code (Del) were originally the following: Digital ASCII data; Digital bit-oriented data; I-Image; T-Text ASCII; VD-Video; V-Voice; Other; Not specified; Not known [Source—Derived from HDD for Naval Architecture Database]

For comparison, the domain of CADM 2.0's DATA-ITEM-TYPE Class Code (as implemented for the Army) is the following: C-Courier/Manual; F-Facsimile; A-Digital ASCII data; B-Digital bit-oriented data; I-Image; T-Text ASCII; L-Video Live; P-Position and navigation; S-Video still frame; V-Voice; Other; Not specified; Not known. [Derived from HDD for the Naval Architecture Database and Army C4RDP Database, modified during the CADM-ASA Workshop, 17-19 June 1998]

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Table H-1. (Cont'd)

No	Mand/ Optional	Field Name	Data Type	Field Definition	Field Examples	IER Matrix Description	Relation to CADM (bold font is a change)
14	Mandatory for ORDs	Timeliness	Pick List	This attribute characterizes how quickly information should be transmitted (relative to its time of origin). It represents the time between the occurrence of the event to the time it is available to the user.	Pick list containing the following values: RT-Real Time; NRT-Near Real Time (<1 sec); M-Moderate (1-10 sec); S-Slow (10 s - 10 m); VS-Very Slow (>10 min).	Real Time/Near Real Time (<1 s) Moderate (1-10 s) Slow (10s-10m) Very Slow (> 10 min)	INFO-REQ Timeliness Code (formerly INFO-EXCH-REQ Timeliness Code), whose domain values are: RT—Real-Time; NRT—Near-Real-Time (< 1 sec); M—Moderate (1-10 sec); S—Slow (10 s - 10 m); VS—Very Slow (>10 min). [Source—HDD for Naval Architecture Database]
15	(Optional)	Perishability	Free Text	Maximum length of time that the information contained in the information element remains useable, i.e. the information accurately depicts (within some specificity) reality.	15 seconds, One Hour, Six Hours, Three Days, One Year, Six Months, etc.	6 Hours 24 Hours 3 Days etc.	INFORMATION-EXCHANGE-REQUIREMENT Perishability Code ²¹ (formerly EXCHANGE-NEED-LINE-IER Perishability Code), whose domain values are: A—More than 8 HOURS; B--4 - 8 HOURS; C--3 - 4 HOURS; D--2 - 3 HOURS; E--1 - 2 HOURS; F--10 - 60 MINUTES; G--1 - 10 MINUTES; H--25 - 59 SECONDS; J--11 - 24 SECONDS; K--5 - 10 SECONDS; L--1 - 4 SECONDS; M—Less than 1 SECOND. Source: U.S. Army C4RDP. Added for CADM 2.0: N—Not specified; X—Not known. Added for JCAPS: T = >360 days; U = 180-360 days; V = 90-180 days; W = 30-90 days; X = 10-30 days; Y = 3-10 days; Z = 1-3 days; A = 8-24 hours

²¹ The recommendation is to use a pick list (not free text) to express perishability.

Table H-1. (Cont'd)

No	Mand/ Optional	Field Name	Data Type	Field Definition	Field Examples	IER Matrix Description	Relation to CADM (bold font is a change)
16	Mandatory for ORDs	Frequency	Free Text	Number of times in a given time period that this information element needs to be sent or received.	Six times per minute, Once per Day, Twice per Day, Every Six Hours, Once a Week, Once a Month, Every Hour, event driven, as required, locally- determined, etc.	Every Hour Once per Day Every 6 Hours Weekly Monthly etc.	INFORMATION-EXCHANGE- REQUIREMENT Frequency Rate ²² (formerly EXCHANGE-NEED-LINE- IER Frequency Rate) for the period specified in INFORMATION- EXCHANGE-REQUIREMENT Time Period Quantity (formerly, EXCHANGE-NEED-LINE-IER Time Period Quantity).
17	Mandatory for ORDs	Classification	Pick List	The highest security classification that can be assigned to this information element.	Pick list containing the following values: Unclassified (U), Confidential (C), Secret (S), Top Secret (TS), Sensitive Compartmented Information (SCI)	Unclassified Confidential Secret Top Secret SCI	SECURITY-CLASSIFICATION ²³ Code (FK) and CAVEATED- SECURITY-CLASSIFICATION Identifier (FK) in INFORMATION- EXCHANGE-REQUIREMENT (formerly EXCH-NEED-LINE-IER in CADM 2.0)
18	Mandatory for ORDs	Size	Free Text	Physical size of the information element, which can be used to determine amount of communications bandwidth needed to exchange information.	Field will include one or more of the following, depending upon the designated Format: Audio - Length of Call; Text - Number of Pages; Graphics - Number of Pages; Still Imagery - Number of Pixels; Stop Motion Imagery - Number of Pixels; Full Motion Imagery - Length of Broadcast; Data - File Size in Kilobytes.	Audio - Length of call Text - No. of pages Graphic - No. of pages Still Imagery - Pixel size Stop Motion Imagery - Pixel size Full Motion Imagery - Length of Broadcast Data - File size in KB	(1) INFORMATION-EXCHANGE- REQUIREMENT EXCHANGE- NEED-LINE-IER Method Voice- Video Duration Quantity; (2) INFORMATION-EXCHANGE- REQUIREMENT EXCHANGE- NEED-LINE-IER Product Data Size Quantity; (3) INFORMATION-EXCHANGE- REQUIREMENT Graphic Page Quantity ²⁴ ; or (4) INFORMATION-EXCHANGE- REQUIREMENT Imagery Pixel Quantity ²⁵

²² The recommendation is to use two numeric values (and not free text) to express frequency rate: time period and the number per time period (following the MCEB-approved attributes of IER for NETWARS. Without numeric values, there will be no way to compare values of this attribute. For DoD data standardization, the name Frequency Rate should probably be changed to Period Frequency Quantity (since the class word for this data element is Quantity and not Rate).

²³ The approved domain values for SECURITY-CLASSIFICATION Code: C = CONFIDENTIAL; S = SECRET; T = TOP SECRET; U = UNCLASSIFIED. The Caveat "SCI" would be expressed by an instance of SECURITY-ACCESS-COMPARTMENT, whose identifier appears in CAVEATED-SECURITY-CLASSIFICATION.

²⁴ The new attribute INFORMATION-EXCHANGE-REQUIREMENT Graphic Page Quantity would be defined by: The quantity of paginated images (e.g., graphic, facsimile) for the information element of an INFORMATION-EXCHANGE-REQUIREMENT.

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Table H-1. (Cont'd)

No	Mand/ Optional	Field Name	Data Type	Field Definition	Field Examples	IER Matrix Description of information attributes across the network architecture and display devices	Relation to CADM (bold font is a change) INFORMATION-EXCHANGE- REQUIREMENT Accuracy Rate ²⁶
19	Mandatory for C4 ORDs only	Accuracy	Free Text	Consistency of information attributes across the network architecture and display devices, properly representing the input level of detail and clarity at the user/display location.	95%	Consistency of information attributes across the network architecture and display devices	INFORMATION-EXCHANGE- REQUIREMENT Accuracy Rate ²⁶
20	Optional	Authoritative Source	Free Text	Source document(s) from which the information for this IER was drawn.	Document title, producing organization/author, date, classification	Title Author Date Classification	DOCUMENT Name, DOCUMENT Source Name, DOCUMENT Approval Calendar Date, SECURITY-CLASSIFICATION Code (FK), and CAVEATED- SECURITY-CLASSIFICATION Identifier (FK) for the instance(s) of DOCUMENT related to the specific Info Exch Req GUIDANCE Identifier (FK) in GUIDANCE-DOCUMENT.
21	Optional	POC	Free Text	Last name, first name, telephone number, email of the person who is responsible for the data in this record.	Jaffe, Chris, (703) 697- 0001, <a href="mailto:jaffeck@hq.somewhere
e.mil">jaffeck@hq.somewhere e.mil	Last Name First Name Tel Email	POINT-OF-CONTACT First Name, POINT-OF-CONTACT Last Name, POINT-OF-CONTACT Commercial Telephone Text, and POINT-OF- CONTACT Unclassified Email Text for the POINT-OF-CONTACT Identifier in GUIDANCE (new relationship from POINT-OF- CONTACT to GUIDANCE)

²⁵ The new attribute INFORMATION-EXCHANGE-REQUIREMENT Image Pixel Quantity would be defined by: The quantity of pixels expressing the size (e.g., for still or stop-motion imagery) for the information element of an INFORMATION-EXCHANGE-REQUIREMENT.

²⁶ The new attribute INFORMATION-EXCHANGE-REQUIREMENT Accuracy Rate would be defined by: The rate, expressed as a percent, that represents the consistency of information attributes across the network architecture and display devices, properly representing the input level of detail and clarity at the user/display location, for a specific INFORMATION-EXCHANGE-REQUIREMENT. Source: CJCSI 6212.01B (Rev 2, 20 Oct 99).

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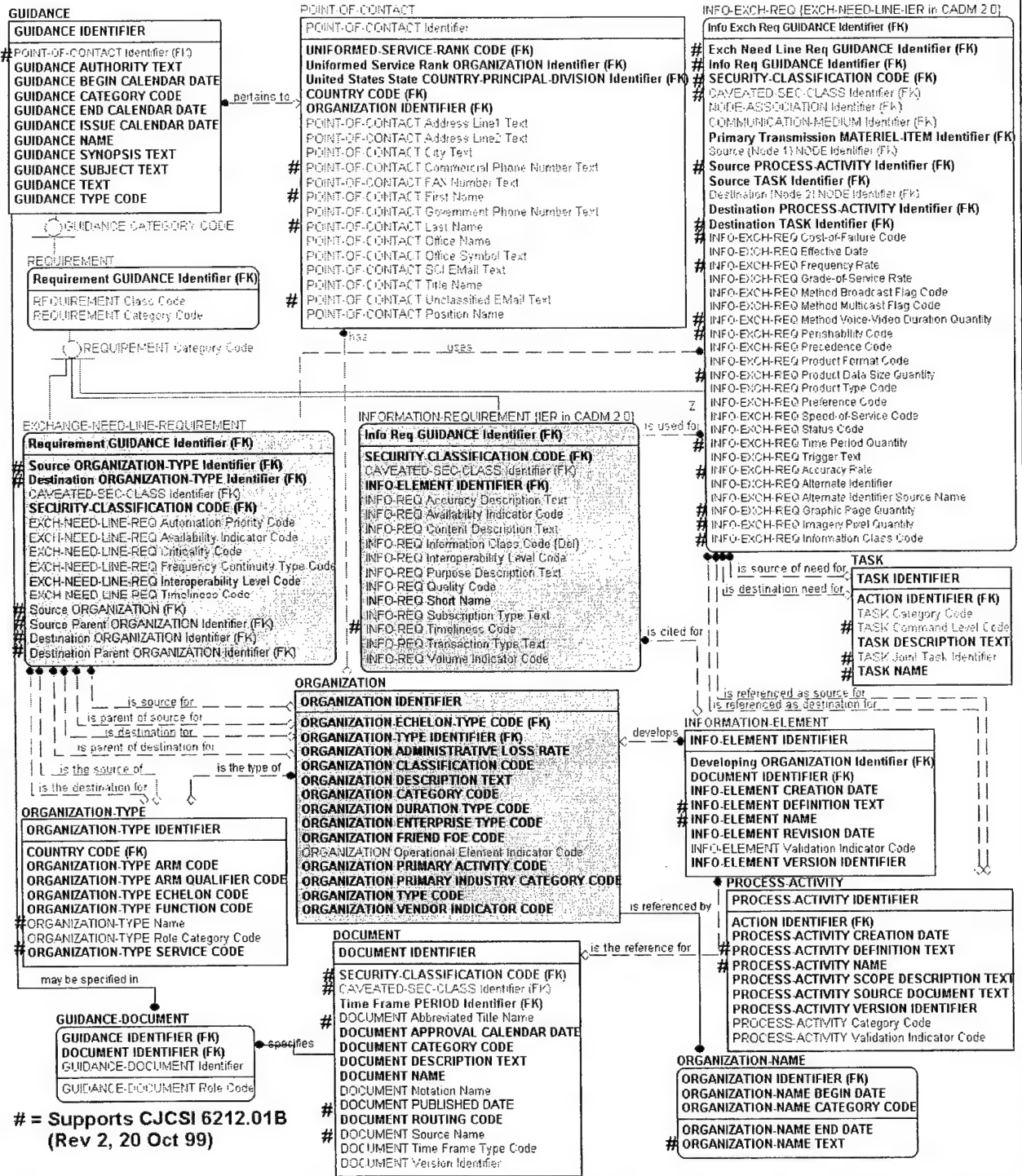


Figure H-1. IER View of CADM Extended for Army Integrated Architecture Data Model and JCAPS

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C. DATA REQUIREMENTS FOR MODELING AND SIMULATION

1. Joint Data Requirements for NETWARS²⁷

The following data requirements are list in a recent memorandum from The Joint Staff on NETWARS [*MCEB Directed Follow-Up Information to Services and Agencies on NETWARS*, Attachment B, *Information Exchange Requirements (IERs) Attributes for Communications Modeling and Simulation*, The Joint Staff [COL(P) Marilyn A. Quagliotti, Acting Director for C4 Systems], 16 June 1998, UNCLASSIFIED]:

- IER ID—Unique IER identifier, established in the Services/Agencies' source database
- Description—Functional description of the IER (e.g., sent by "x" to multiple consumers under the following circumstances/OPSITs)
- Precedence/Priority—IER level of importance (routine, priority, immediate, or flash)
- Classification—E.g., U, C, S, TS, TS SCI, other
- Perishability—Length of time of usefulness (in seconds)
- Terminal Equipment—Type of communications equipment/systems elements required for transmission. Can be generic (e.g., phone, radio, computer, etc.)
- Application Name—Type of message format (e.g., JTIDS type message format)
- Distribution Rule—Broadcast or multi-cast, etc.
- Producer OPFAC—Operational Facility which generates/sends the IER
- Consumer OPFAC—Operational Facilities which receive the IER
- Period—Basis of the frequency of IER transmissions
- Period Frequency—Number of transmissions per period
- Type—Voice, video, data, etc.
- Product Size—Size of the IER. If data, then in bytes. If voice, then in seconds.
- Task—Name of the task associated with the OPFAC type, task unique id, and Military Service or Agency with which the task is associated.

²⁷ This section is excerpted from CADM Version 2.0 (pp. 621-622).

2. Data Requirements Defined in NETWARS Standards Documentation²⁸

a. NETWARS Overview

NETWARS is a joint tactical communications modeling capability being developed by J6 to provide an integrated set of modeling tools that can, in a timely, fashion address communication burden, contention, and other issues at the joint operation level and below. NETWARS is intended to assist the J6, the CINCs, and other users, in performing Communications Burden Analysis, Contingency Analysis, and Emerging Technology Analysis.

Central to the NETWARS program is the concept of sharing and reuse of models developed by different organizations at different times. To facilitate this effort, the NETWARS program will create a set of guidelines, or standards, which, if followed by communications simulation model developers, will minimize the difficulty of combining NETWARS standard model elements²⁹ with other standard NETWARS model elements to create new composite verifiable and validatable models for conducting analysis tasks. [NETWARS Standard 1.1]

b. ROLE of OPNET in NETWARS

At this point, the commercial simulation package OPNET has been selected for the initial implementation of NETWARS. We have attempted to define and describe the NETWARS standards in a way that is independent of the choice of simulation package. However, we have not yet reached the point where we can make the standards totally package-independent while still providing enough specificity to make the standards useful to model developers. Therefore, this version of the standards document does assume an OPNET simulation package is being used, and the terminology and approach is based in some cases directly on the OPNET terminology and approach. Creation of NETWARS standards which are package-independent remains a task for the future. [NETWARS Standard 1.2]

c. Data Standardization for NETWARS

In order to allow standard data sets to be re-used with different models, and to prevent the NETWARS database and GUI from having to be redesigned whenever new models are introduced, it is necessary to standardize attributes. The NETWARS approach will be as

²⁸ This section is excerpted from CADM Version 2.0 (pp. 617-620).

²⁹ The term "model element" is used to refer to a unit of simulation software. An example of a model element would be an OPNET node model that simulates the behavior of a communication device such as a router, switch, or radio. Other types of model element, such as code that simulates a layer in a protocol stack, are also possible.

follows. First, devices must be classified, for example: radios, routers, LAN interfaces, switches. Then, attributes at each layer in the protocol stack will be defined for each class of device. [NETWARS Standard 4.5]

In general, any model element will have a number of attributes (variables) which must be set to define characteristics of the model prior to execution. (For example, radio frequencies at which a transmitter is operating, transceiver speeds, data rates, buffer sizes.) Some of these attributes can be set by the NETWARS tool front end; the remaining attributes are set to the OPNET defaulted values, this is why these attributes must be defined in a standard way (standard names, units, etc.). This standard provides guidance on how this standardization is to be achieved. [NETWARS Standard 2.1.4]

d. NETWARS Environment

The NETWARS program includes development of an environment (including a set of tools) that facilitates assembling models and scenarios to allow for analysis. This environment and tools is being designed by the NETWARS developers based on the requirements described in the NETWARS Management Development Plan. Such requirements include: automatic generation of a network configuration based on an operational scenario and databases of operational units, automatic generation of a traffic load based on the scenario and information exchange requirements (IERs) databases, modification of the network configuration as the scenario progresses, to account for units mobility and/or destruction of nodes or network reconfiguration by the users, and access to terrain databases and other databases (e.g., atmospheric conditions). [NETWARS Standard 3.0]

e. Scenario Threads for NETWARS

Based on the current structure of the simulation description file for the NETWARS Block 2 phase, traffic specification will be based on the so-called "stochastic threaded traffic methodology." [NETWARS Standard 3.7.4]

A thread is a series of operationally-related communications events. Receipt of one information exchange requirement (IER) in a thread may result in transmission of another IER. In Block 2 traffic is defined in the simulation description file in terms of threads³⁰. Operational Elements (OEs) determine what information exchanges to initiate based on the threads that have been defined by the analyst for the scenario. When an IER is received by an OE, it will

³⁰ Note that a thread may consist of only one IER. If all threads are defined in this way, this amounts to explicitly determining all information exchanges that will occur during the scenario.

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determine whether this should trigger subsequent IERs based on the definition of the thread.[NETWARS Standard 3.7.4]

f. IER Data Requirements for NETWARS

OPFAC instances involved in generating (sources) and receiving (destinations) the threads are explicitly defined. To each OPFAC involved in the scenario (network), a destination list is associated. Probability Density Functions (PDFs), coupled with thread attributes, then are used to specify the stochastic threaded behavior of traffic flow originated by this OPFAC and its potential destinations. The following is the structure of an IER listed in a given thread [NETWARS Standard 3.7.4]:

- List of Destination OPFAC Instance Names: String
- Source SE: String, indicating the name of the communications device to be used (within that OPFAC instance) to transmit this IER. (Future OE models may be capable of making this selection autonomously.)
- IER ID: String, indicating the IER ID to be sent
- Probability: Double, indicating the probability associated with sending this IER if its pre-conditions are met
- Predecessor: Integer, indicating the IER ID that must be received before the current IER can be sent
- Size: Integer, indicating in bytes (seconds) the mean length (duration) of the communications message
- Delay: Double, indicating the estimated time in seconds that the source SE will wait before sending the current IER once its pre-conditions have been met
- Perishability: Double (seconds)
- Type of traffic: String, indicating the type of traffic (voice, data, video, VTC, telemedicine, imagery, FTP, E-Mail, Xterm, others). This information may be used to characterize the Quality of Service (QoS)
- Priority: Integer, indicating the priority level: Flash Override, Flash, Immediate, Priority, or Routine (for voice), and Urgent, Priority, or Routine (for data)
- Classification: Security classification.

Each thread is specified by its unique ID name, as well as by a probability density function associated with its occurrence. [NETWARS Standard 3.7.4]

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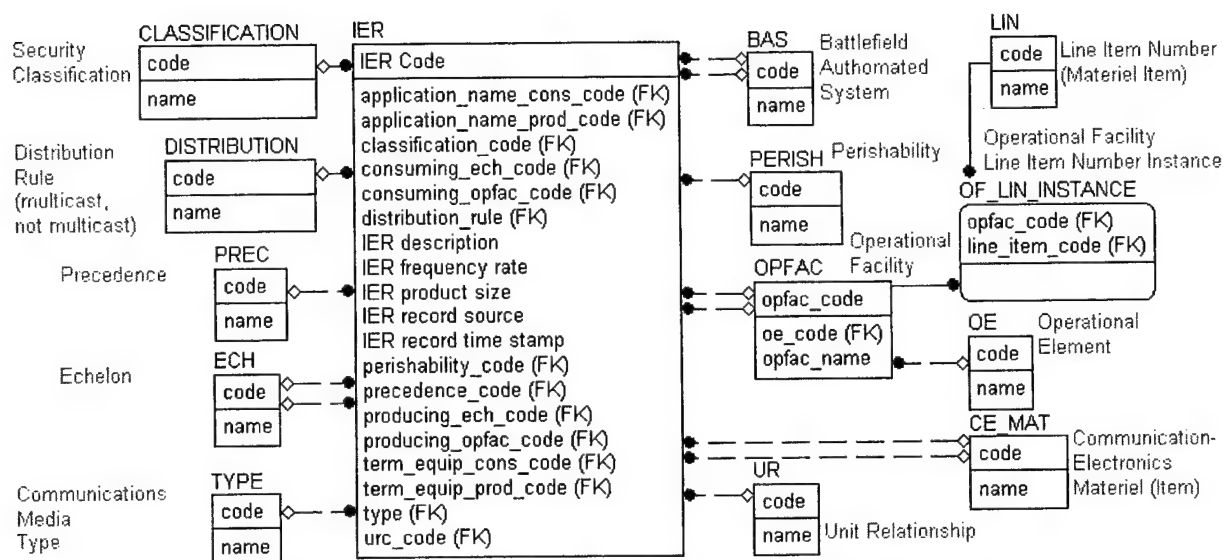


Figure H-3. NETWARS Physical Schema in IDEF1X Notation

The attributes of the central entity (IER) identified in the two figures above are defined or otherwise described in Table H-1. Many of the codes specified for IER are taken from the C4RDP; these codes are further defined in Table H-2 (below). Note that each IER has the following:

- Single unique identifier (IER Code)
- Separate values for the consuming and producing software application (BAS code), echelon (ECH code), operational facility (OPFAC code), and terminal CE materiel (MAT) class (CE_MAT code).
- Security classification with some indication of access limitations (Classification code)
- Text describing the IER (IER Description)
- Frequency of use (IER Frequency_Rate), characterized as the number of times in a period that the IER will be exchanged (there is no specification of such a period; perhaps a default of 24 hours is assumed)
- Product size (IER Product Size), consisting of a mixed domain that may be in kilobytes (for data) or in seconds (for voice and video)
- Communications media type (IER Type)
- Perishability (Perishability_Code) with domains such as greater than 8 hr; 4 to 8 hr; 3 to 4 hr; 2 to 3 hr; 1 to 2 hr; 10 to 60 min, and other domains with shorter times.
- Precedence (Precedence_Code) with domain values such as R—Routine; P—Priority; O—Immediate; Z—Flash; and Y—Flash Override.

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- Unit relationship (UR) with domain values such as Adjacent US DIV/CORPS unit to DIV/CORPS unit; Host Nation unit to CORPS unit; and Mutual Support Unit receiving General Support.

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Table H-2. Attributes of IER Entity in NETWARS Physical Schema

Attribute Name	Attribute Description/Definition	Attribute Domain Specification
Application_Name_Cons_Code	code that represents the receivers Battlefield Automated System (BAS)	See BAS code (below).
Application_Name_Prod_Code	code that represents the producers Battlefield Automated System (BAS)	See BAS code (below).
Classification_Code	Classification ID points to the Classification Table.	See classification code (below).
consuming_ech_Code	The Echelon describes the consuming OPFAC's deployment .	See ECH code (below).
Consuming_OPFAC_Code	The Consumer OPFAC ID Identifies the OPFAC that is receiving this IER	See OPFAC code (below).
IER Code	Unique Key that identifies this IER	The Sep 99 example NETWARS database has 6,344 values of IER Code, including the following: 157534A; 157594A; 157599A; 157601A; 157606A; 15767A; 16080A; 167856R; 168915R; 19284A; 19290A; 19291A; 20665A; 77973A; 80279A; 80283A; 80286A; 80287A; 82376A; 82378A; 84078A; 84080A; 92032A; 92033A; 92164A; 92165A; J10128; J10129; J10138; J10145; J17315; J17324; J17339; J17344; J17359; J17360; J17369; J17374; J17375; J17385; J17398; J17404; J17407; J17408; J17425; J17430; J18954; J18976; J18979; J18980; J18989; J18992; J18993; J19010; J19011; J19020.
IER Description	Textual description of the IER	Text (255 characters). (Values not provided in Sep 99 example NETWARS database.)
Distribution_Rule	field was in original NETWARS database and held the distribution value for the IER (i.e. Random, Multicast, Broadcast, All)	See DISTRIBUTION code (below).
IER Frequency_Rate	the rate expressed as the number of times in one period, that the IER will be exchanged	Number (long integer).
IER Product_Size	field was in original NETWARS database and held the Average kilobytes needed for data, or the average seconds needed if the type was voice or video	Number (long integer).
IER Record_Source	the source database of the IER - where it came from	Text (255 characters).
IER Record_Time Stamp	the date and time the IER was acquired for the NETWARS database	Date/Time.
IER Type	code denoting the communication media (i.e. Data, Voice etc)	C—Courier/Manual; D—Data; F—Facsimile; L—Live Video; P—POS/NAV; R—Record Traffic; S—Still Frame Video; V—Voice; Z—Undefined.
Pershability_Code	time frame of message	See PERISH code (below).
Precedence_Code	code that represents the precedence of the IER	See PREC code (below).
producing_ech_Code	The Echelon describes the producing OPFAC's deployment .	See ECH code (below).
Producing_OPFAC_Code	The Producer OPFAC ID Identifies the OPFAC that is responsible for producing this IER.	See OPFAC code (below).
Term_Equip_Cons_Code	This ID identifies the terminal equipment used by the producing OPFAC to receive this IER. This field will be used for voice and video transmissions only	See CE_MAT code (below). Sep 99 example NETWARS database populated with instances of LIN Code (see below) and not CE_MAT code.
Term_Equip_Prod_Code	This ID identifies the terminal equipment used by the producing OPFAC to send this IER. This field will be used for voice and video transmissions only.	See CE_MAT code (below). Sep 99 example NETWARS database populated with instances of LIN Code (see below) and not CE_MAT code.
URC_Code	code that denotes the relationship type between the two communicating entities	See UR code (below).

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Table H-3 provides nearly complete domain specifications for the NETWARS database, to allow for analysis of comparable domains for other sources. The table itself compares domain values presented in a September 1999 example NETWARS database provided with the current (September 1999) physical schema described above with those defined for the C4RDP. In some cases (also noted in the table), the C4RDP has archived domain values and added additional domain values.

Table H-3. Other NETWARS Attribute Definitions and Domains

Attribute Name and Definition	Attribute Domain Description
BAS code—Code that represents the an unique Battle Field Automated System.	25ID(L)(L)MRS; 6ID(L) CTIS; AADSACS; ACPS; ACS; ADCIS; ADLER; AFATDS; AFCS; AIRES; ALCOM CTIS; AMOS; AN/TSQ-73 (BDE); AQCESS; ASAS-ACE; ASAS-CCS; ASAS-EACIC; ASAS-SUB; ASAS-TCAE; ASSSC; ASWBPL; ATCAE; ATDS; AHS; AUSTACCS; AVMS; AWACS; AWIS; BATES; BCS; BICES; BICS; BLIS; BSMS-K; BVTC; CAPS-II; CARMS; CBS-X; CDA; CHCS; CIRCE; CMOS; COINS; CORPS ADA BDE ABMOC; CRUSADER; CSSCS; CTAPS; CTAPS (INTEL); DAAS; DAMMS-R; DASPS-E; DIAOLS; DMD (TF); DMS; DS4; DTSS; DWRS; DX-CEM; EDAS; ENHANCED TRACKWOLF; EPDS; ETUT; FAAD A2C2 LNO; FAAD BN ABMOC; FAAD BTRY CP; FAAD C3I; FAAD MSC LNO; FAAD PLT/SEC CP; FAAD SENSOR C2; FAAD WPN IWCS/IWSD; FBCB2; FBS; FCS; FDDM; FDS (MLRS); FED; FF TPQ-36; FF TPQ-37; FIST DMD; GAPEWS; GCCS-Army; GCSS-ARMY; GEADGE; GRCS ARF; GRCS-IPF; GTN; HEROS; IDM; IEWCS; IFIS; IFSAS; IGRV ARF; IGRV-IPF; IMBC; IMETS; INDRSA; IPDS; ISYSCON; ITAADS; ITAWDS; JDISS; JISS/JAIS; JMCIS (NTCS-A); JSS; JSTARS-ARP; JSTARS-GSM (BLOCK I); JSTARS-GSM(BLOCK II); JTIDS EQUIPD A/CRAFT; KAIS; KISS; LFCCIS (ACIS); LIF; LOGMARS-A; LOGMARS-M; LOGMARS-S; LOGMARS-T; LOGSA; LTACFIRE; MAGIS IAS; MAMS; MC4; MC4 - TYPE 1; MC4 - TYPE 2; MC4 - TYPE 3; MC4 - TYPE 4; MCRC; MCS; MCS-AD; MCS-AMPS; MCS-ANBACIS; MCS-CSS; MCS-FS; MCS-IEW; MCS-IVIS; MDS; MEDBLD; MEDLOG-D; MEDMNT; MEDOPT; MEDPAR; MEDPAR-D; MEDREG; MEDSUP; MFFIMS; MMS; MRM; mts; NA; NAEW; NAFISS; NAOMIS; NAT-INTEL-SYSTEM; NCS-EPLRS; NTDS (AEGIS); NTVS; OSC; PACCMS; PATRIOT ECS; PATRIOT ICC; PERRMS; PHOENIX; PLDMD; PWIS-2; QRMP; QUICKFIX IIB; QUICKLOOK II; QUICKLOOK-GPF; RAPIDE; RCAS; RM/ER; RPPAS; SAAS; SAAS-1/3; SAAS-4; SAAS-DAO; SACRA; SAILS; SAMS-1; SAMS-2; SAMS-3; SAMS-W; SARSS-1; SARSS-1 (INTERIM); SARSS-2A; SARSS-2B; SIDPERS-3; SIS; SLAR; SPBS-R; SPBS-R(AV); SPORT/ETM-I; STACCS; STANFINS-R; STARCIPS; STARFIARS; SUMS; TAADS; TACCIMS; TACFIRE (BCD); TACFIRE (BN); TACJAM; TACS; TAIS; TAOM; TAPDB; TAPER; TARPMMS; TAV; TC AIMS II; TCAC; TCAC (USMC); TCMS; TCO; TCS; TEAMMATE; TEAMPACK; TECCS; TERMS; THAAD TOC; TIBS; TMAMS; TMIP; TOP GABLE/SSP-S; TOP GALLANT/SSP-S; TOP GRAPHIC/SSP-S; TOP SERIES/SSP-S; TRACKWOLF; TRAFFICJAM; TRAILBLAZER; TRAP; TREDs; TRIGs; UAV-C GCS; UAV-CR; UAV-E; UAV-MPCS; UAV-SR; ULLS; ULLS-A; ULLS-G; ULLS-S4; UMMIS; UTACCS; VFAS; VFMED; VTAADS; WARS; WAVELL; WESTIS; WPS; WWMCCS (252 of the 274 values from June 1999 C4RDP).
BAS name—The name of the Battlefield Automated System.	Name of the acronyms listed above.
CE_MAT code—The code that represents the specific value of a communications equipment used to transmit information over an interface.	00—NONE; 01—ACUS-FIXED PHONE; 02—ACUS-MOBILE PHONE; 03—LAN-PACKET SWITCH 802.3 PORT; 04—AUTODIN/DMS; 05—LOCAL AREA NETWORK (LAN) STAND ALONE; 06—ACUS-PACKET SWITCH X.25; 07—UHF SINGLE CHANNEL TACSAT; 08—HF MULTICHANNEL RADIO; 09—SHF SINGLE CHANNEL TACSAT; 10—EHF SINGLE CHANNEL TACSAT; 11—HF SINGLE CHANNEL RADIO; 12—VHF/FM SINGLE CHANNEL RADIO; 13—TACTICAL INTERNET - DATA; 14—VHF/AM SINGLE CHANNEL RADIO; 15—UHF/FM SINGLE CHANNEL RADIO; 16—UHF/AM SINGLE CHANNEL RADIO; 17—UHF MULTICHANNEL RADIO; 18—GROUND POSITIONING SYSTEM; 19—ASYNCHRONOUS TRANSFER MODE; 20—ENHANCED POSITION LOCATION REPORTING SYS; 30—JOINT TACTICAL INFO DISTRIBUTION SYS; 31—JOINT TACTICAL RADIO; 36—COMMANDERS TACTICAL TERMINAL; 37—DEFENSE DATA NETWORK; 40—MAGNETIC/OTHER DIGITAL MEDIA; 50—PRINTOUTS/MICROFICHE-NON DIGIT; 60—SECURE INTERNET PROTOCOL ROUTER NETWORK; 61—NON-SECURE INTERNET PROTOCOL ROUTER NET; 70—TO BE DETERMINED. (All 30 values from June 1999 C4RDP Database.)
CE_MAT name—The name, expressed in a word or words, of the Communication Electronic Materiel Type.	See above.

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Table H-3 (Cont'd)

Attribute Name and Definition	Attribute Domain Description
classification code—The unique identifier that represents this classification type to the NETWARS database	[null]—UNKNOWN; 5—CONFIDENTIAL(SI); 6—SECRET(SI); 7—TOP SECRET(SI); 8—TOP SECRET(SI-TK); 9—SCI/Top Sec; C—CONFIDENTIAL; S—SECRET; T—TOP SECRET; U—UNCLASSIFIED.
classification name—The textual description of the classification type.	See above.
Distribution code [not defined]	1—Broadcast; 0—Not Broadcast.
classification name [not defined]	See above.
ECH code—The code that represents the hierarchical ties to a unit in relation to subordinate/superior units.	0—MULTIPLE ECHELONS OF TOES; 1—CONUS; 2—THEATER/ARMY/ECHELON ABOVE CORPS; 3—CORPS; 4—DIVISION; 5—BRIGADE/REGIMENT; 6—GROUP; 7—TBD; 8—BATTALION/SQUADRON; 9—HOSPITAL; A—HQ & HQ UNITS (for Btry, Co, & Det); B—COMPANY/BATTERY/TROOP (not a Hq & Hq); E—DETACHMENT (not a Hq & Hq); F—PLATOON; G—SQUAD; H—SECTION/PARTY/BRANCH; I—TEAM/ELEMENT/CREW/CELL; J—NODE; L—CENTER; M—COMMAND; N—DIVISION ARTILLERY; P—CORPS ARTILLERY; Q—DIVISION SUPPORT COMMAND; R—CORPS SUPPORT COMMAND; S—THEATER ARMY AREA COMMAND; Y—EAC (Non Army); Z—SPTD UNIT. (All 27 values from June 1999 C4RDP Database.)
ECH name—The name of the Echelon	See above.
LIN code—Code that represents the material line item.	331 values also occur in the 1999 C4RDP (the following is an excerpt): AADSAC—AADSACS HARDWARE; ACC1—AN/TYQ-37(V) - ASAS WORKSTATION WITH ONE (1) DSVT (S64488); ACIS—ACIS (IRIS) HARDWARE; ADCIS—ADCIS HARDWARE; ADLER—ADLER HARDWARE; AFCS—AUTOMATIC FIRE CONTROL SYSTEM; AGCCS—AGCCS: SUNSPARC 10 OR HP; ALSRS—ALSRS HARDWARE; AMDA—AMDAHL 5890-200E; AMDB—AMDAHL V8; ARC186—AN/ARC-186 - RADIO SET.; ARC187—RDO SET UHF SATCOM/LOS (USAF); ARC199—AN/ARC-199 - RADIO SET, HF, AM, AIRBORNE; ATHS—AIRBORNE TARGET HANDOFF SYSTEM; ATT3B2—AT&T 3B2/600G; AUSTAC—AUSTACCS HARDWARE; AVION—AVIONICS PACKAGE; B00529—AN/ASN-76 - ATTITUDE AND HEADING REFERENCE SYSTEM (AHR); BATES—BATES HARDWARE; C08565—TACTICAL ARMY CSS COMPUTER SYSTEM (TACCS); C18297—AN/GYK-33A COMPUTER SET GENERAL (OTAR & SOI); C30607—AN/TLQ-17A - TRAFFIC JAM; C40499—COMPUTER GROUP GUN DIRECTION OL-200/GYK-29; C40746—JTACS: COMMAND SYSTEM TACTICAL AN/TYS-1; C59313—AN/ASC-15B COMMUNICATIONS CENTRAL (UH-60); C59330—AN/TSC-122, HF MULTICHANNEL SYSTEM; C60164—AN/TSC-99, COMMUNICATIONS CENTRAL; C60294—COMPUTER SET BALLISTIC; MORTAR M23; C72876—OL-377/TYQ-33 - REMOTE KEYBOARD VISUAL DISPLAY UNIT; C77687—SHTU: AN/PSG-8(V) DIGITAL DATA SET (SIMPLIFIED HTU); C89935—TROJAN SPIRIT II AN/TSQ-190(V)3; C90003—TROJAN SPIRIT II AN/TSQ-190(V)1; C90071—TROJAN SPIRIT II AN/TSQ-190(V)2; CTASC2—CTASC-11 WORKSTATION; CTASCI—CTASC-I; CTF—CORPS TACFIRE SET; CTT—AN/TSC-125 CTT; D11248—DTSS: AN/TYQ-48 (DIGITAL TOPOGRAPHIC SUPPORT SYSTEM); D15941—AN/PSG-2 - DIGITAL COMMUNICATION TERMINAL; D17407—AN/PRD-10 - DIRECTION FINDER SET RECEIVER RADIO, MAN PORTABLE; (MDD); etc.
LIN name—The name of the material line item	See above.

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Table H-3 (Cont'd)

Attribute Name and Definition	Attribute Domain Description
OE code—The code that represents a person or group of persons normally situated on a prime mover to accomplish a specific purpose.	312 values for OE also occur in the 1999 C4RDP (the following is an excerpt): 10—RADIOLOGY; 12—FSO/FSE/FSC/FSS; 16—SPECIAL STAFF; 17—SUPPORT CELL; 18—S6/G6 COMM SECTION; 19—Forensics; 1A—CRIME LAB; 1B—LOGSEC; 20—CDR/LDR/SUPERVISOR; 21—XO/DEPUTY CDR; 22—S1/G1 OFFICER; 23—S2/G2 OFFICER; 24—S3/G3 OFFICER; 25—S4/G4 OFFICER; 26—RETRANS/RELAY; 27—SUPPORT OPS OFFICER; 28—TOC; 29—NBC/SMOKE/DECON; 2A—INTEL SPT; 2B—C-E STAFF; 2C—JIC/JTF; 2D—INTELLIGENCE; 2E—TECH INTEL; 2F—MCHNL RDO TML; 2G—MCHNL RDO RELAY; 2H—AIR DEFENSE; 2M—MAINT, GROUND; 2N—MAINT, UNIT; 2P—AUTOMATED SVCS SPT; 2T—CLASS I SPT; 30—FWD/AERIAL OBSVR; 31—ALOC/COMBAT TRAINS; 32—TAC AIR CONTROL; 33—FIRE DIRECTION CENTER; 35—WRECKER/RECOVERY VEH; 36—MAINT, MOTOR; 38—RADIO ACCESS UNIT; 39—CLASS V; 3A—MANPADS; 3C—MISSILE; 3D—ENGINEER; 3E—LIAISON; 3F—SATCOM/TACSAT; 3G—COMBAT CAMERA; 3H—COMBAT CAMERA SPT; 3I—OPS & MAINT; 3K—LOS; 3M—LEN; 3N—TELEVISION; 3O—NODE MGMT FACILITY; 3P—HF RECORD TRAFFIC; 3Q—EOC; 3R—MOBILE GATEWAY VAN; 3S—LAB; 3T—MAIN & ASSAULT; 3U—ISB; 3V—CCPS; 3W—CCES; 3X—INFO MGMT; 40—PLRS/JTIDS; 41—PROVOST MARSHALL; 43—DIRECT SUPPORT; 44—CONTACT; 46—ESM; 47—ECM; 48—MAINT, ELECTRONICS; 49—COUNTER INTELLIGENCE; 4R—CLASS III & WATER; 4S—CLASS III/POL; 4T—CLASS II, IIIP, IV; 50—PRISONER OF WAR; 51—GSR/RADAR; 52—SIGINT PROC; 55—TECHNICAL INSPECTION; 57—INFO SYSTEMS; 59—ABMOC; 5K—INTERROG/EXPLOIT; 5S—SUPPORT; 60—WEATHER; 61—LIAISON OFFICER; 64—CHAPLAIN/MINISTRY; 65—AIRCRAFT; 66—PETROLEUM; 67—EXT NODE; 68—AID STATION; 69—MAINT, AIRCRAFT; 6A—OPERATIONS; 70—FIRSTSERGEANT/SERGEANT; 71—S3/G3 AIR; 72—CSM (CMD SGT MAJ); 73—MAINT, MISSILE/SYSTEM; 74—AMMUNITION; 75—MAINT/SYS TECH; 77—REAR AREA OPNS CENTER; 78—MULTIPLEXER RELAY; 79—MOTOR OFF/SGT; 80—S1/G1; 81—S3/G3; 82—S2/G2; 83—S3/G3 TAC; 85—FIST; 87—S5/G5 OFFICER; 88—S6/G6 SIGNAL OFFICER; 89—S4/G4; 8B—S2/S3 (G2/G3) OFF; 8C—S2/S3 (G2/G3); 8F—S5/G5; 90—STAFF JUDGE ADVOCATE; 91—PUBLIC AFFAIRS; 92—SUPPLY; 93—S2/G3 TAC; etc.
OE name—The name of the Operational Element	See above.
OPFAC Code—The code that represents a specific OPFAC.	NETWARS has 6,344 values of OPFAC Code, including the following examples (C4RDP, for comparison, has 6,893 values at various levels of approval, 4198 of which are approved): 102C0—JIC/JTF (REAR); 102C1—JIC/JTF (FWD); 102C2—GCCS; 10650—JTIDS EQUIPD ACFT; 10BE0—JCMO/JCEWS; 20290—NAVY NBC WARNING; 20980—USN AEGIS; 20981—USN E2 ATDS; 20BE0—NIPS; 22200—THEATER NAVFOR CDR; 22810—THEATER NAVFOR G3; 22820—THEATER NAVFOR G2; 22870—THEATER NAVFOR CMO; 30290—AIR FORCE NBC WARNING; 30970—USAF TACS; 30980—USAF E3 AWACS; 30981—USAF AOC-BCE; 30982—USAF AIR TFC CTRL CTR; 30BC0—USAF UAV MCE/TCS; 30BE0—USAF CTAPS/CIS; 30FG0—USAF TRIGS/CARS; 32200—THEATER AFFOR CDR; 32600—USAF GLOBAL WX SVC; 32601—USAF THTR FORECAST UNIT; 32650—USAF UAV AIRCRAFT; 32651—JSTARS ACFT; 32810—THEATER AFFOR G3; 32820—THEATER AFFOR G2; 32870—THEATER AFFOR CMO; 3I320—AIRLIFT COORDINATION CELL; 3I3E0—AF AIR EVAC LIAISON TM; 3I520—USAF DSU/TSSS; 3I9J0—HCAA AIR CREW; 3IBC0—AF CBT CTRL TM; 3IBC1—USAF UAV L/R ELE; 40290—MARINE NBC WARNING; 40980—USMC TAOM; 40BE0—USMC IAS (MAGIS); 40BE1—USMC TCAC; 42200—THEATER MARFOR CDR; 42810—THEATER MARFOR G3; 42820—THEATER MARFOR G2; 42870—THEATER MARFOR CMO; 523E0—U.S. EMBASSY/MISSION; 523Q0—INTERNATIONAL AID AGENCIES; 52BI0—HOST NATION GOVERNMENT; 52GX0—HOST NATION FORCES; 702D0—NAT'L TECH INTEL CTR; 702D1—INSCOM; 702D2—NGIC; 702D3—DIA (INTELL); 703F0—GBS(TIBS/TRAP/TADIXS/TRIXS); 703F1—GBS TAC INJECTION POINT; 70490—CIA (DCIIS); 70980—NATO E3 NAEW; 709N0—ARMY TCAE; 70GO0—NSA MCSF; 70PI0—NPIC/CIO; 70PI1—REGIONAL IMAGERY LIBRARY; 70PI2—NATIONAL IMAGERY CTR; A0640—CHAPLAIN/UMT; A0641—CHAPLAIN - FORCE XXI; A0720—BDE/RGT/BN/SQDN CSM; A0721—CSM - FORCE XXI; A5120—CAV REGT FSO; A5200—SEP AR BDE/RGT CDR (TRK); A5201—SEP AR BDE/RGT CDR (WHL); A5202—AR BDE CDR (WHL); A5203—AR BDE CDR (TRK); etc.
OPFAC name—textual description of opfac title.	See above.
PERISH code—The code that represents the time that the Information exchanged.	0—> 8 HOURS; 1—4 - 8 HOURS; 2—3 - 4 HOURS; 3—2 - 3 HOURS; 4—1 - 2 HOURS; 5—10 - 60 MINUTES; 6—1 - 10 MINUTES; 7—25 - 59 SECONDS; 8—11 - 24 SECONDS; 9—5 - 10 SECONDS; A—1 - 4 SECONDS; B—< 1 SECOND; [null]—UNKNOWN.
PERISH name—The textual description	See above.

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Table H-3 (Cont'd)

Attribute Name and Definition	Attribute Domain Description
PREC code—Code that denotes the precedence value for the IER	R—Routine; P—Priority; O—Immediate; Z—Flash; Y—Flash Override;[null] —UNKNOWN.
PREC name—The precedence name	See above.
UR code—Code that denotes a unit relationship	The following 32 values for UR also occur in the 1999 C4RDP: BT—U.S. Army Unit to NATO Military; C0—Direct Support to Supported (ADA, ARTY & ENG spt); D0—General Support to Supported (ADA, ARTY & ENG spt); F0—GSR unit to Reinforced unit; G0—Area Support to Supported; JK—Theater (Army) Unit to Host Nation (Civil); KJ—Host Nation (Civil) to Theater (Army); LL—CO to CO (different BN - same BDE); LM—Adjacent US DIV/CORPS unit to DIV/CORPS unit; LP—Host Nation unit to CORPS unit; MG—Mutual Support Unit receiving General Support; ML—DIV/CORPS unit to Adjacent DIV/CORPS unit; MN—DIV/CORPS unit to Adjacent Allied DIV/CORPS unit; MP—Corps to Theater (EAC); NM—Adjacent Allied DIV/CORPS unit to DIV/CORPS unit; NP—Other U.S. Service unit to U.S. Army unit; PL—Corps unit to Host Nation unit; PM—Theater(EAC) to Corps; PN—U.S. Army unit to other U.S. Service unit; RR—CO to CO (different BDE - same DIV); TB—NATO Military to U.S. Army Unit; TT—Theater to Theater (Includes CONUS); UU—CO to CO (different DIV - same CORPS); ZZ—UNDEFINED (Used for notional IERs only). Note: Values of the following URs (not in NETWARS) are in the June 1999 version of the C4RDP: GM—General Support to Mutual Supported.
UR name—long textual description of the unit relationship	See above.

D. CADM SUPPORT FOR MODELING AND SIMULATION³¹

CADM 2.0 uses several entities to capture detailed IER requirements:

- INFORMATION-EXCHANGE-REQUIREMENT (for the information content)
- EXCHANGE-NEED-LINE-REQUIREMENT (for the need line)
- EXCHANGE-NEED-LINE-IER (for a specific pairing of information content with need line)
- INFORMATION-EXCHANGE-MATRIX-ELEMENT (a row in the INFORMATION-EXCHANGE-MATRIX that provides implementation details at the system level).
- The following (Army) extensions to EXCHANGE-NEED-LINE-IER: EXCHANGE-NEED-LINE-IER-ELEMENT, EXCHANGE-NEED-LINE-IER-ELEMENT-PRODUCT, and EXCHANGE-NEED-LINE-IER-ELEMENT-METHOD.

Note: INFORMATION-EXCHANGE-REQUIREMENT and EXCHANGE-NEED-LINE-REQUIREMENT are both subtypes of REQUIREMENT, which is a subtype of GUIDANCE, in CADM 2.0. Table H-4 relates the NETWARS IER data requirements to CADM 2.0.

³¹ This section is excerpted from CADM Version 2.0 (pp. 628-631).

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Table H-4. Relation of CADM 2.0 to IER Data Requirements for NETWARS

IER Attribute	Definition	Relation to CADM 2.0
IER ID	Unique IER identifier—established in the Services/Agencies' source database	Information Exchange Requirement GUIDANCE Identifier Exchange Need Line Requirement GUIDANCE Identifier EXCHANGE-NEED-LINE-IER Identifier INFORMATION-EXCHANGE-MATRIX-ELEMENT Identifier for a specific INFORMATION-EXCHANGE-MATRIX
Description	Functional description of the IER (e.g., sent by "x" to multiple consumers under the following circumstances/OPSITs)	GUIDANCE Synopsis Text for a specific EXCHANGE-NEED-LINE-REQUIREMENT INFORMATION-EXCHANGE-REQUIREMENT Purpose Description Text INFORMATION-EXCHANGE-REQUIREMENT Content Description Text
Precedence/ Priority	IER level of importance (routine, priority, immediate, or flash)	EXCHANGE-NEED-LINE-IER Precedence Code (e.g., R—Routine; P—Priority; O—Immediate; Z—Flash; Y—Flash Override)
Classification	E.g., U, C, S, TS, TS SCI, other	SECURITY-CLASSIFICATION Code (FK) in EXCHANGE-NEED-LINE-REQUIREMENT (e.g., U, C, S, TS) CAVEATED-SECURITY-CLASSIFICATION Identifier (FK) in EXCHANGE-NEED-LINE-REQUIREMENT (e.g., SCI, No Foreign Dissemination)
Perishability	Length of time of usefulness (in seconds)	EXCHANGE-NEED-LINE-REQUIREMENT Timeliness Code [e.g., RT—Real Time; NRT—Near-Real-Time (< 1 sec); M—Moderate (1-10 sec); S—Slow (10 s - 10 m); VS—Very Slow (>10 min)] INFORMATION-EXCHANGE-REQUIREMENT Timeliness Code [e.g., RT—Real Time; NRT—Near-Real-Time (< 1 sec); M—Moderate (1-10 sec); S—Slow (10 s - 10 m); VS—Very Slow (>10 min)] EXCHANGE-NEED-LINE-IER Perishability Code (e.g., 0--> 8 HOURS; 1--4 - 8 HOURS; 2--3 - 4 HOURS; 3--2 - 3 HOURS; 4--1 - 2 HOURS; 5--10 - 60 MINUTES; 6--1 - 10 MINUTES; 7--25 - 59 SECONDS; 8--11 - 24 SECONDS; 9--5 - 10 SECONDS; A--1 - 4 SECONDS; B-- < 1 SECOND)
Terminal Equipment	Type of communications equipment/systems elements required for transmission. Can be generic (e.g., phone, radio, computer, etc.)	Primary Communications MATERIEL-ITEM Identifier (FK) in EXCHANGE-NEED-LINE-IER-ELEMENT-METHOD EXCHANGE-NEED-LINE-IER Grade-of-Service Rate (in bits per second)
Application Name	Type of message format (e.g., JTIDS type message format)	EXCHANGE-NEED-LINE-IER-ELEMENT-PRODUCT Type Code [e.g., 02--E-MAIL (X.400/500); 03-FTP; 06--USMTF-DATA; 07--USMTF-VOICE; 08--VMF] EXCHANGE-NEED-LINE-IER-ELEMENT-PRODUCT Format Code (e.g., SPA001--C445 - NBC 1 SUMMARY REPORT - USMTF OCT 91)
Distribution Rule	Broadcast or multi-cast, etc.	EXCHANGE-NEED-LINE-IER-ELEMENT-METHOD Broadcast Flag Code (True, False) EXCHANGE-NEED-LINE-IER-ELEMENT-METHOD Multicast Flag Code (True, False)
Producer OPFAC	Operational Facility which generates/sends the IER	Source ORGANIZATION-TYPE Identifier (FK) in EXCHANGE-NEED-LINE-REQUIREMENT (an ORGANIZATION-TYPE can be an operational element, operational facility, communications facility, command post, or command post cell, among others)
Consumer OPFAC	Operational Facilities which receive the IER	Destination ORGANIZATION-TYPE Identifier (FK) in EXCHANGE-NEED-LINE-REQUIREMENT
Period	Basis of the frequency of IER transmissions	EXCHANGE-NEED-LINE-IER Time Period Quantity EXCHANGE-NEED-LINE-REQUIREMENT Frequency Continuity Type Code [e.g., C—Continuous; P—Periodic; AO—As Occurring (AO)]
Period Frequency	Number of transmissions per period	EXCHANGE-NEED-LINE-IER Frequency Rate
Type	Voice, video, data, etc.	COMMUNICATION-MEDIUM Identifier (FK) in EXCHANGE-NEED-LINE-REQUIREMENT
Product Size	Size of the IER. If data, then in bytes. If voice, then in seconds.	INFORMATION-EXCHANGE-REQUIREMENT Volume Indicator Code (e.g., H—High; M—Medium; L—Low) EXCHANGE-NEED-LINE-IER-ELEMENT-METHOD Video Duration Quantity (could be modified to <i>Voice-Video Duration Quantity</i>) EXCHANGE-NEED-LINE-IER-ELEMENT-PRODUCT Size Quantity
Task	Name of the task associated with the OPFAC type, task unique id, and Military Service or Agency with which the task is associated.	Source TASK Identifier (FK) and Destination Task Identifier (FK) in EXCHANGE-NEED-LINE-IER

Source for Columns 1 and 2: [MCEB 1998]

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Table H-5 shows that each of the 14 M&S data requirements needed for supporting the ASA and required to be populated by the Army Operational Architecture are already fully supported by the ASA Data Model View of CADM 2.0. This is due to the fact that both the CADM extensions for the ASA and the M&S requirements were based on a common source, the C4RDP.

Table H-5. M&S Data Requirements for the ASA from the Operational Architecture

Data Requirement	Description of Data Requirement	Relation to ASA Data Model View of CADM 2.0
Consumer	Receiver of message	Source ORGANIZATION-TYPE Identifier (FK) in EXCHANGE-NEED-LINE-REQUIREMENT
Producer	Originator of message	Destination ORGANIZATION-TYPE Identifier (FK) in EXCHANGE-NEED-LINE-REQUIREMENT
Unit Relationship Code	Producer/consumer relationship (command, DS, GS, area etc.)	EXCHANGE-NEED-LINE-IER-ELEMENT-PRODUCT Sender-Receiver Relationship Code
Broadcast code	Describe message as broadcast, multicast or point to point	Derived from: EXCHANGE-NEED-LINE-IER Method Broadcast Flag Code and Method Multicast Flag Code (if both flags are false, the method is point to point)
Frequency	Number of message transmissions within a given period	EXCHANGE-NEED-LINE-IER Frequency Rate (number per day)
Acknowledgement Required	Identifies that message is received	EXCHANGE-NEED-LINE-IER-ELEMENT-METHOD Acknowledgment Flag Code
Quantifiable Element(s) of Information (QEI)	Message or information to be exchanged	EXCHANGE-NEED-LINE-IER Product Format Code
Perishability	Amount of time that message is useful	EXCHANGE-NEED-LINE-IER Perishability Code
Speed of Service	Required transmission time of message	EXCHANGE-NEED-LINE-IER Speed of Service Code (if a numerical value is needed, this attribute can be redefined but C4RDP data would have to be pre-processed to convert codes to numeric values)
Cost of Failure	Impact of transmission failure on mission accomplishment	EXCHANGE-NEED-LINE-IER Cost of Failure Code
QEI Security Level	Required security level of message	SECURITY-CLASSIFICATION Code (FK) and CAVEATED-SECURITY-CLASSIFICATION Identifier (FK) in EXCHANGE-NEED-LINE-IER
Precedence	Message priority	EXCHANGE-NEED-LINE-IER Precedence Code
Transceiver Format	Medium desired	COMMUNICATION-MEDIUM Identifier (FK) in EXCHANGE-NEED-LINE-IER
Size/Duration of QEI	Length and/or time requirements of message	EXCHANGE-NEED-LINE-IER Product Data Size Quantity and Method Voice-Video Duration Quantity

Figure H-4 shows the Operational Architecture entities from the CADM used to support M&S data requirements.

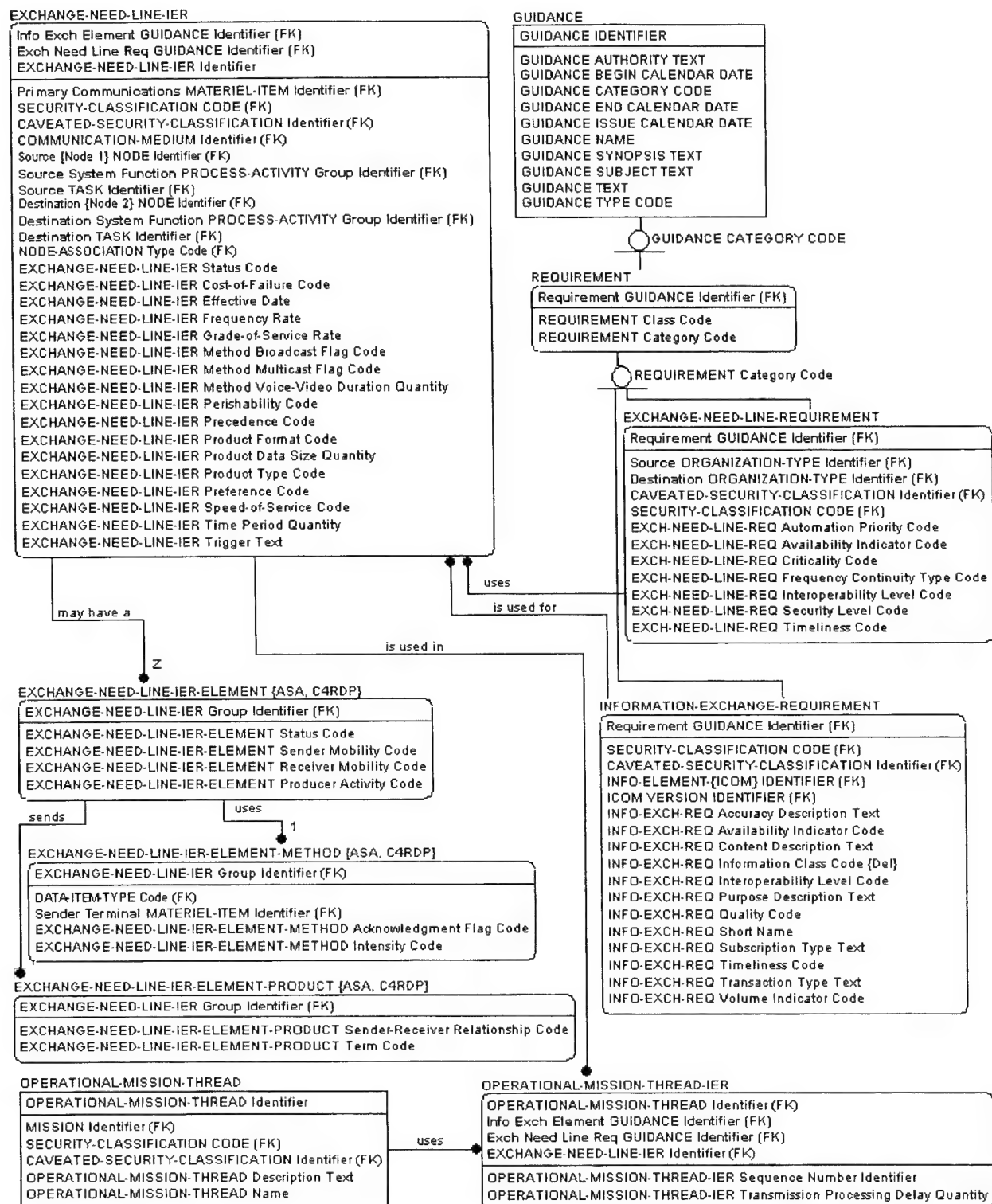


Figure H-4. IER and Mission Thread View of the CADM and the ASA Extension of the CADM

APPENDIX I. ANALYSIS OF INFORMATION ASSURANCE DATA REQUIREMENTS

A. BACKGROUND

The JCAPS Program Manager initiated in the Fall of 1999 an Information Assurance (IA) Architecture Working Group to address critical information requirements of the DoD Chief Information Officer (CIO). The team is actually building an architecture and is making use of the current Prototype 2.0 JCAPS. Products produced by the IA Architecture Working Group through December 1999 include the following:

- Overview (AV-1)
- Draft data dictionary (AV-2)
- Operations concept (OV-1)
- Activity Model (OV-5)
- More than 1,500 IERs for “as is” data flows from the Activity Model
- *Information Assurance Sensitivities and Properties*, which defines 11 IA-specific attributes for an IER.

B. RECOMMENDATIONS

Based on the latest draft *Information Assurance Sensitivities and Properties* data requirements paper issued by the IA Architecture Working Group, the data requirements appear to be specifically IER-related and may be captured by defining a single entity, INFORMATION-EXCHANGE-REQUIREMENT-ASSURANCE, as a child of INFORMATION-EXCHANGE-REQUIREMENT. Specifications for that entity are provided in Table I-1.

Table I-1. Information Assurance Entity Specifications

Entity Name	Entity Type	Entity Definition	Entity Table Name
INFO-EXCH-REQ-ASSURANCE	Dependent	The sensitivities and properties of an INFORMATION-EXCHANGE-REQUIREMENT needed to ensure that the information is protected and occurs between and only between the designated Source and the designated Recipient. Source: Information Assurance Architecture Working Group, December 1999.	IER_ASSURANCE

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The IA Architecture Working Group has defined a set of sensitivity attributes and a separate set of property attributes. These all appear to be candidates for the single IER-ASSURANCE entity noted above. The result is depicted in Figure I-1.

INFO-EXCH-REQ-ASSURANCE	
Info Exch Req GUIDANCE Identifier (FK)	
INFO-EXCH-REQ-ASSURANCE	Information Criticality Code
INFO-EXCH-REQ-ASSURANCE	Access Control Type Code
INFO-EXCH-REQ-ASSURANCE	Dissemination Control Type Code
INFO-EXCH-REQ-ASSURANCE	Protection Duration Code
INFO-EXCH-REQ-ASSURANCE	Protection Duration Quantity
INFO-EXCH-REQ-ASSURANCE	Protection Suspense Calendar Date
INFO-EXCH-REQ-ASSURANCE	Releasability Code
INFO-EXCH-REQ-ASSURANCE	Releasability Event Description Text {Del}
INFO-EXCH-REQ-ASSURANCE	Releasability Condition Description Text
INFO-EXCH-REQ-ASSURANCE	Confidentiality Type Code
INFO-EXCH-REQ-ASSURANCE	Integrity Type Code
INFO-EXCH-REQ-ASSURANCE	Availability Effort Code
INFO-EXCH-REQ-ASSURANCE	Non-Repudiation Sender Code
INFO-EXCH-REQ-ASSURANCE	Non-Repudiation Receiver Code

Figure I-1. Proposed IER Extension for Information Assurance

In some cases, two or more attributes of IER-ASSURANCE have been defined (see Table I-2) to capture all the requirements of one IA sensitivity or property. Specifically, the sensitivity for Protection Duration requires not only a code to denote the class of duration to be provided by separate attributes to specify the number of days for one class of duration (Specified as a period..., Code 6) and to specify the suspense date for another (Specified until..., Class 4). Further, the property Dissemination Authorization is specified with three “releasability” attributes, one for the class of releasability (IER-ASSURANCE Releasability Code), one for describing (in text) a possible event upon whose occurrence release might occur,³² and one for describing (in text) a possible condition that must (also) be satisfied for release of information to occur.

³² A change from between the 21 December 1999 requirements document and the 23 December 1999 requirements document implies that the attribute IER-ASSURANCE Releasability Event Description Text might no longer be necessary. To reflect this fact, the term “{Del}” has been added to the attribute name.

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Table I-2. Information Assurance Attribute Specifications

Attribute Name	Column Name	Datatype	Attribute Definition	Attribute Domain Note
Info Exch Req GUIDANCE Identifier	GUID_id	int	(12090/1) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
INFO-EXCH-REQ-ASSURANCE Access Control Type Code	IERA_accss_ctrl_cd	smallint	The code that represents the class of mechanisms used to ensure only those authorized can access information or systems.	1 = Not Required—No checks of any kind; anybody can access the information or the information system (e.g., access to most world wide web sites); 2 = Profile—Access is controlled by assessing whether the individual seeking access displays the characteristics typically required (e.g., a car load of individuals are granted access to a post because they are in uniform and the car has a sticker); 3 = Password and Identification Document—Individual seeking access must be know and provide a predetermined password [e.g., bank ATMs require both the user's card (their ID) and the user to enter a Personal Identification Number (PIN) (their password)]; 4 = SSL (Secure Socks Layer (Server-based); 5 = ID Cert/ACL—An identification certificate AND presence of the identified entity on a valid Access Control List (ACL); 6 = Crypto Ignition Key (CIK)—Key required for secure access (e.g., STU III); 7 = Pairwise Key—The source encrypts the information and the destination decrypts the information using symmetric keys. Source: Information Assurance Architecture Working Group, December 1999.
INFO-EXCH-REQ-ASSURANCE Availability Effort Code	IERA_av_effrt_cd	smallint	The code that represents the relative level of effort required to be expended to ensure the information can be accessed for use; i.e., systems and personnel are available at the required performance levels. Examples: An alert about a missile launch detection would have a HIGH availability effort requirement while a report about a delayed shipment of "Stars and Stripes" would likely have a LOW availability effort requirement.	1 = Low—Best effort to meet information exchange timeliness requirements with resources that are available; 2 = Medium—Specific resources have been allocated to ensure information exchange timeliness requirements are met; 3 = High—Pre-emptive resource allocation to meet information exchange timeliness requirements. Source: Information Assurance Architecture Working Group, December 1999.
INFO-EXCH-REQ-ASSURANCE Confidentiality Type Code	IERA_confid_ty_cd	smallint	The code that represents the class of protection required for information to prevent unintended disclosure.	1 = Unavailable—Used in those "as is" circumstances where there is no capability to provide confidentiality for the information element; 2 = Not Required—For unclassified, uncaveated, public information; 3 = Clearance—An appropriate clearance for the level of classification of the information is required to access receive or access the information element; 4 = Need to Know—A determination that the individual needs the information and is authorized to use it is made before access is granted; if the information is classified, need to know also implies the individual has the appropriate clearance. Source: Information Assurance Architecture Working Group, December 1999.

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Table I-2. (Cont'd)

Attribute Name	Column Name	Datatype	Attribute Definition	Attribute Domain Note
INFO-EXCH-REQ-ASSURANCE Dissemination Control Type Code	IERA_disctrl_ty_cd	smallint	The code that represents the class of restrictions on receivers of information—whether accessing on-line sources of information or receiving information products—based on sensitivity of information.	1 = Public—Unrestricted (e.g., Defense LINK); 2 = Private—Restricted in accordance with Privacy Act (e.g., names of dependents); 3 = Controlled—Restricted in accordance with local command decision (e.g., release of deception plan outside of planning cell); 4 = Restricted—Restricted in accordance with established policy. Source: Information Assurance Architecture Working Group, December 1999.
INFO-EXCH-REQ-ASSURANCE Information Criticality Code	IERA_info_crit_cd	smallint	The code that represents the benefit that the information exchange element provides to the purpose and objective of the action being taken. Note: Mission Support and Administrative MAY be Mission Critical if essential to the operation (e.g., medical evacuation information). Note: The field values are drawn from the criticality measures used for Y2K.	1 = Category 1 Mission Critical (Force C2)—Critical and high level information (e.g., emergency action message, commander's guidance); 2 = Category 2 Mission Critical (Mission Operations)—Required in support to operations (e.g., JTF contingency plans, operations plan); 3 = Category 3 Mission Critical (Core Functions)—Ongoing information exchanges (e.g., configuration and guidance information, restricted frequency list); 4 = Mission Critical [not otherwise specified]; 5 = Mission Support—Logistics, Transportation, Medical (e.g., gallons of POL scheduled for delivery); 6 = Administrative—Personnel, pay, training, etc. (e.g., change in allotment) Source: Information Assurance Architecture Working Group, December 1999.
INFO-EXCH-REQ-ASSURANCE Integrity Type Code	IERA_integ_ty_cd	smallint	The code that represents the class of requirements for checks that the content of the information element has not been altered, that the information received is exactly the information that was sent. Note: Whether the information is correct (see INFO-REQ Accuracy Text) is immaterial. Example: There could be Mandatory integrity checks required for Emergency Action Messages while similar checks would be Not Required for the message relaying next Tuesday's AFN schedule.	1 = Unavailable—Even though checks for integrity may be desirable, the capability to accomplish such checks is not currently available; 2 = Not required—This information and its uses do not call for the effort to check on integrity (e.g., an integrity check would not be required for printed copy of the Stars & Stripes; information transiting the JWICS is assumed to be safe and no integrity check is required); 3 = Discretionary—The decision on whether checks for integrity are to be accomplished is based on local decision; 4 = Mandatory—Checks for integrity are required. Source: Information Assurance Architecture Working Group, December 1999.
INFO-EXCH-REQ-ASSURANCE Non-Repudiation Receiver Code	IERA_nonrep_rcv_cd	smallint	The code that represents the requirements for unassailable knowledge that the information sent was received by the intended recipient. Note: Verification can be by human or electronic means.	1 = Proof of receipt is required; 2 = Proof of receipt is not required; 3 = Not available—Even though proof of receipt may be desirable, such capabilities are not currently available. Source: Information Assurance Architecture Working Group, December 1999.

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Table I-2. (Cont'd)

Attribute Name	Column Name	Datatype	Attribute Definition	Attribute Domain Note
INFO-EXCH-REQ-ASSURANCE Non-Repudiation Sender Code	IERA_nonrep_snd_cd	smallint	The code that represents the requirements for unassailable knowledge that the information received was sent by the stated source. Note: Verification can be by human or electronic means. Example: A unit would want Proof of Origin for an order directing them to a new target location.	1 = Proof of origin is required; 2 = Proof of origin is not required; 3 = Not available—Even though proof of origin may be desirable, such capabilities are not currently available. Source: Information Assurance Architecture Working Group, December 1999.
INFO-EXCH-REQ-ASSURANCE Protection Duration Code	IERA_produr_ty_cd	smallint	The code that represents the class of protection duration that applies to information assurance. Note: There will be cases where data has been declassified but information assurance protections are still required. For example, electronic records—no longer classified—must still have integrity protection to ensure the data stored is not altered. Thus, the Protection Duration will not necessarily be the same as the downgrading instructions.	1 = None; 2 = Encrypted for Transmission Only (EFTO)—After transmission is completed, information protection is not required; 3 = Specified OADR; 4 = Specified until explicit expiration date; 5 = Specified as End of Mission; 6 = Specified as a period of time beginning as of the date and time of transmission and ending after an explicitly provided length of time. Source: Information Assurance Architecture Working Group, December 1999.
INFO-EXCH-REQ-ASSURANCE Protection Duration Quantity	IERA_prot_dur_qy	float	The length of time during which information assurance protections (e.g. information access, classification) of the information is required (e.g., 30 days).	Unit of measure: days.
INFO-EXCH-REQ-ASSURANCE Protection Suspense Calendar Date	IERA_protsuspend_s_caldt	int	The calendar date upon which the designated level of assurance protection expires.	
INFO-EXCH-REQ-ASSURANCE Releasability Code	IERA_rel_cd	smallint	The code that represents the class of controls required for further dissemination of information based on policy or condition. Example: Operations information could be released to news media Conditional Upon Operational Commander's Situation Assessment.	1 = Unavailable—Used in those "as is" circumstances where there is no capability for dissemination authorization even if such capability is desirable; 2 = Routine—Information is released in accordance with established procedures and is released without exception to those established procedures; 3 = Conditional—Information released ONLY when specified conditions occur, and then in accordance with established authority and release procedures (e.g., host nation requirement for information as a specified exception case; operations information could be released to news media as "Conditional: 1 Hour after start of operation"). Source: Information Assurance Architecture Working Group, December 1999.

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Table I-2. (Cont'd)

Attribute Name	Column Name	Datatype	Attribute Definition	Attribute Domain Note
INFO-EXCH-REQ-ASSURANCE Releasability Condition Description Text	IERA_rel_cn dscr_tx	char(100)	The text that characterizes the condition that must be met for further dissemination to be permitted.	
INFO-EXCH-REQ-ASSURANCE Releasability Event Description Text {Del}	IERA_rel_ev dscr_tx	char(100)	The text that characterizes the event upon which dissemination is permitted.	

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**ANNEX J. PROPOSED DATA MODEL DIAGRAMS FOR JCAPS
AS A VIEW OF CADM 2.0 AND ARMY CADM**

- 1. Entity Index (2 pp)**
- 2. Logical View of JCAPS 2.1 (8 pp)**
- 3. Physical View of JCAPS 2.1 (8 pp)**

Table J-1. List of Entities for Proposed JCAPS View of CADM

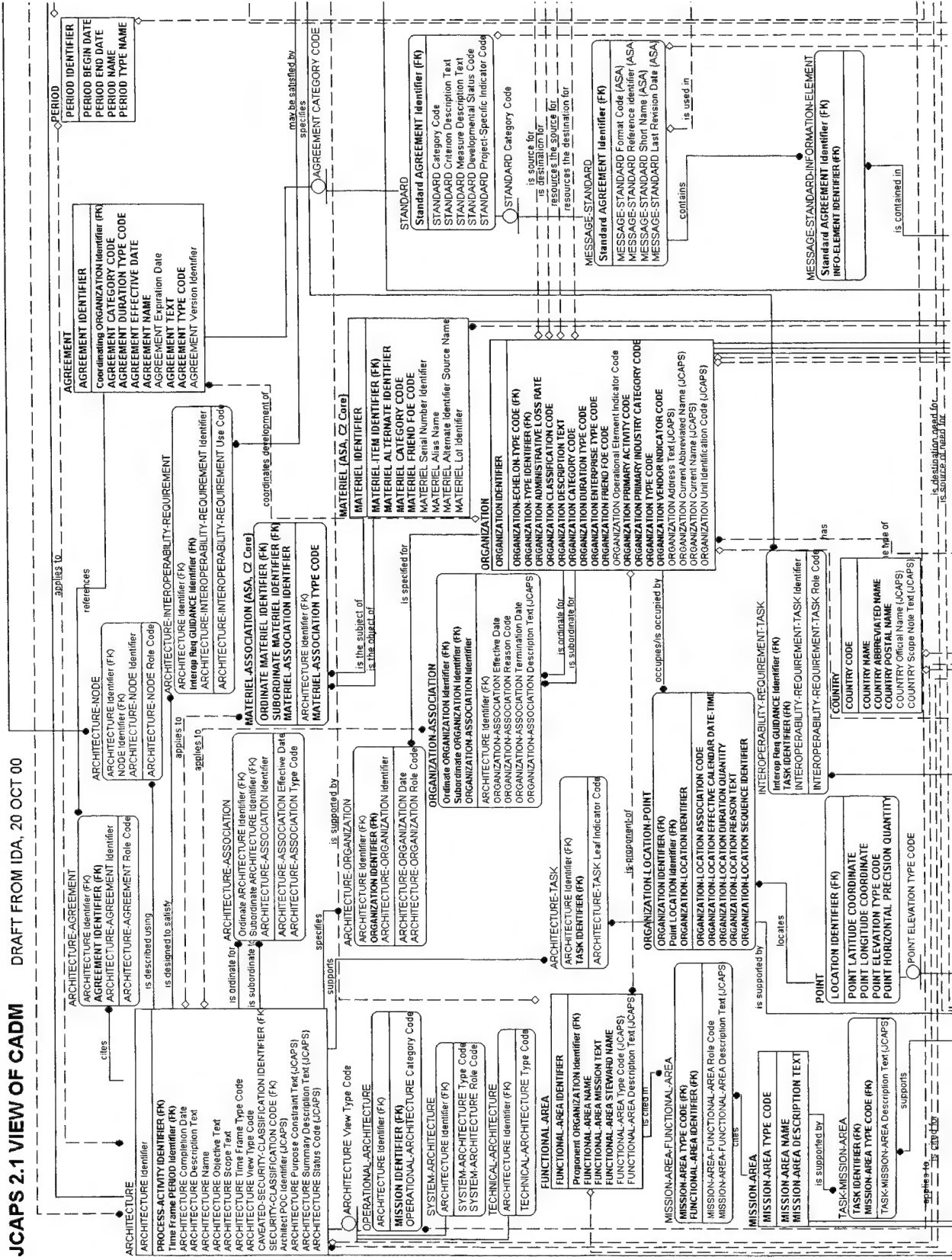
Entity Name	Log V. Page	Phys V. Page
AGREEMENT	J-4	J-12
ARCHITECTURE	J-4	J-12
ARCHITECTURE-AGREEMENT	J-4	J-12
ARCHITECTURE-ASSOCIATION	J-4	J-12
ARCHITECTURE-DOCUMENT	J-6	J-14
ARCHITECTURE-INTEROPERABILITY-REQUIREMENT	J-4	J-12
ARCHITECTURE-NODE	J-4	J-12
ARCHITECTURE-ORGANIZATION	J-4	J-12
ARCHITECTURE-TASK	J-4	J-12
BATTLEFIELD-AUTOMATED-SYSTEM (ASA, C4RDP)	J-7	J-15
CAPABILITY	J-5	J-13
CAVEATED-SECURITY-CLASSIFICATION	J-8	J-16
COMMUNICATION-CHANNEL (JCAPS)	J-11	J-19
COMMUNICATION-CIRCUIT (JCAPS)	J-11	J-19
COMMUNICATION-CIRCUIT-IER-ASSOCIATION (JCAPS)	J-8	J-16
COMMUNICATION-CIRCUIT-TYPE (JCAPS)	J-11	J-19
COMMUNICATION-LINK	J-10	J-18
COMMUNICATION-LINK-IER-ASSOCIATION (JCAPS)	J-11	J-19
COMMUNICATION-LINK-TYPE (JCAPS)	J-9	J-17
COMMUNICATION-MEDIUM	J-6	J-14
COMMUNICATION-SYSTEM	J-8	J-16
COMMUNICATION-SYSTEM-TRANSMISSION (ASA, C4RDP--CELIN)	J-8	J-16
COUNTRY	J-4	J-12
DATA-ITEM	J-6	J-14
DATA-ITEM-TYPE	J-6	J-14
DOCUMENT	J-8	J-16
DOCUMENT-ASSOCIATION	J-6	J-14
DOCUMENT-CAVEATED-SECURITY-CLASSIFICATION	J-8	J-16
EQUIPMENT-TYPE	J-5	J-13
EQUIPMENT-TYPE-SOFTWARE-ITEM	J-5	J-13
EXCHANGE-NEED-LINE-REQUIREMENT	J-6	J-14
EXCHANGE-RELATIONSHIP-TYPE (ASA, C4RDP)	J-7	J-15
FUNCTIONAL-AREA	J-4	J-12
GUIDANCE	J-6	J-14
GUIDANCE-ASSOCIATION	J-6	J-14
GUIDANCE-DOCUMENT	J-6	J-14
INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)	J-6	J-14
INFO-EXCH-REQ-ASSURANCE	J-7	J-15
INFO-EXCH-REQ-ELEMENT (ASA)	J-7	J-15
INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	J-7	J-15
INFO-EXCH-REQ-ELEMENT-PRODUCT (ASA)	J-7	J-15

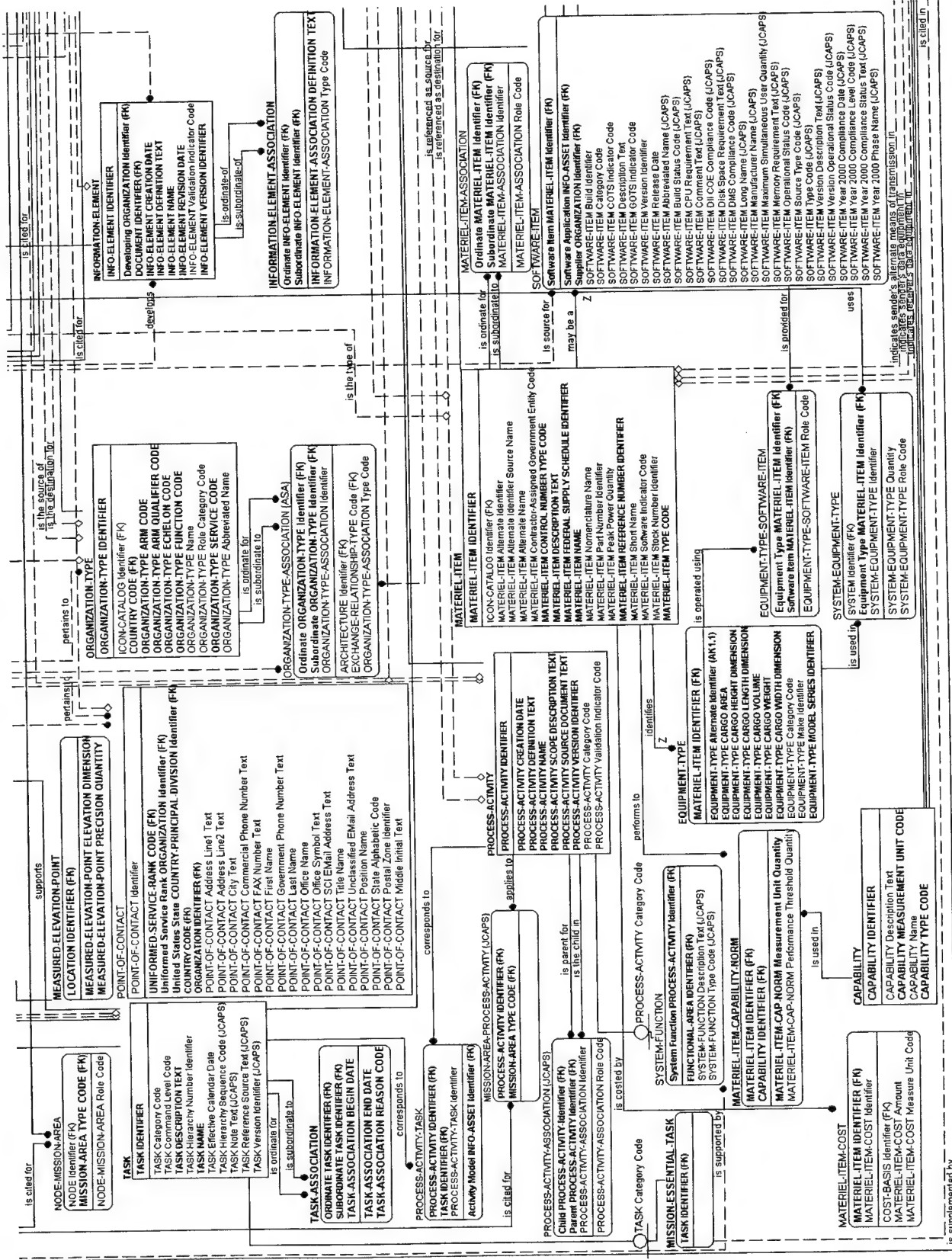
Entity Name	Log V. Page	Phys V. Page
INFORMATION-ELEMENT	J-5	J-13
INFORMATION-ELEMENT-ASSOCIATION	J-5	J-13
INFORMATION-EXCHANGE-MATRIX (OV-3; SV-6)	J-6	J-14
INFORMATION-EXCHANGE-MATRIX-ELEMENT	J-6	J-14
INFORMATION-LINK	J-10	J-18
INFORMATION-REQUIREMENT (IER in CADM 2.0)	J-6	J-14
INFORMATION-REQUIREMENT-DATA-ITEM-TYPE	J-6	J-14
INTERFACE (JCAPS)	J-9	J-17
INTERFACE-CONTROL-DOCUMENT	J-8	J-16
INTERFACE-IER-ASSOCIATION (JCAPS)	J-8	J-16
INTERFACE-TYPE (JCAPS)	J-11	J-19
INTEROPERABILITY-REQUIREMENT	J-6	J-14
INTEROPERABILITY-REQUIREMENT-TASK	J-4	J-12
MATERIEL (ASA, C2 Core)	J-4	J-12
MATERIEL-ASSOCIATION (ASA, C2 Core)	J-4	J-12
MATERIEL-ITEM	J-5	J-13
MATERIEL-ITEM-ASSOCIATION	J-5	J-13
MATERIEL-ITEM-CAPABILITY-NORM	J-5	J-13
MATERIEL-ITEM-COST	J-5	J-13
MEASURED-ELEVATION-POINT	J-4	J-12
MESSAGE-STANDARD	J-4	J-12
MESSAGE-STANDARD-INFORMATION-ELEMENT	J-4	J-12
MISSION	J-9	J-17
MISSION-AREA	J-4	J-12
MISSION-AREA-FUNCTIONAL-AREA	J-4	J-12
MISSION-AREA-PROCESS-ACTIVITY (JCAPS)	J-5	J-13
MISSION-ESSENTIAL-TASK	J-5	J-13
MISSION-ESSENTIAL-TASK-LIST	J-8	J-16
MISSION-ESSENTIAL-TASK-LIST-ELEMENT	J-6	J-14
NETWORK	J-10	J-18
NETWORK-ASSOCIATION	J-10	J-18
NETWORK-NODE	J-10	J-18
NETWORK-ORGANIZATION	J-8	J-16
NODE	J-10	J-18
NODE-ASSOCIATION	J-10	J-18
NODE-ASSOCIATION-INTEROPERABILITY-REQUIREMENT	J-10	J-18
NODE-ASSOCIATION-NETWORK	J-10	J-18
NODE-COMMUNICATION-MEDIUM	J-10	J-18
NODE-DATA-ITEM-TYPE	J-10	J-18
NODE-HIERARCHY	J-10	J-18
NODE-LINK	J-10	J-18
NODE-LINK-CAPABILITY	J-10	J-18

Entity Name	Log V. Page	Phys V. Page
NODE-LINK-COMMUNICATION-MEDIUM	J-10	J-18
NODE-MATERIEL	J-10	J-18
NODE-MISSION-AREA	J-5	J-13
NODE-ORGANIZATION	J-11	J-19
NODE-ORGANIZATION-TYPE	J-11	J-19
NODE-PROCESS-ACTIVITY	J-10	J-18
NODE-SYSTEM	J-9	J-17
NODE-SYSTEM-ASSET-OWNERSHIP {JCAPS}	J-9	J-17
NODE-SYSTEM-ASSOCIATION {JCAPS}	J-9	J-17
NODE-SYSTEM-COST-MANAGEMENT {JCAPS}	J-9	J-17
NODE-SYSTEM-SOFTWARE-ITEM {JCAPS}	J-9	J-17
NODE-SYSTEM-TRANSMISSION {JCAPS}	J-9	J-17
NODE-TASK	J-10	J-18
NODE-TREE	J-8	J-16
NODE-TREE-NODE-HIERARCHY	J-6	J-14
OPERATIONAL-ARCHITECTURE	J-4	J-12
OPERATIONAL-MISSION-THREAD	J-9	J-17
OPERATIONAL-MISSION-THREAD-ELEMENT	J-7	J-15
OPERATIONAL-SCENARIO	J-9	J-17
ORGANIZATION	J-4	J-12
ORGANIZATION-ASSOCIATION	J-4	J-12
ORGANIZATION-LOCATION-POINT	J-4	J-12
ORGANIZATION-TYPE	J-5	J-13
ORGANIZATION-TYPE-ASSOCIATION {ASA}	J-5	J-13
PERIOD	J-4	J-12
POINT	J-4	J-12
POINT-OF-CONTACT	J-5	J-13
PROCESS-ACTIVITY	J-5	J-13
PROCESS-ACTIVITY-ASSOCIATION {JCAPS}	J-5	J-13
PROCESS-ACTIVITY-TASK	J-5	J-13
REQUIRED-INTEROPERABILITY-CAPABILITY	J-6	J-14
SECURITY-ACCESS-COMPARTMENT	J-10	J-18
SECURITY-CLASSIFICATION	J-10	J-18
SOFTWARE-ITEM	J-5	J-13
SOFTWARE-ITEM-ASSOCIATION {ASA}	J-7	J-15
STANDARD	J-4	J-12
SYSTEM	J-8	J-16
SYSTEM-ARCHITECTURE	J-4	J-12
SYSTEM-ASSOCIATION	J-8	J-16
SYSTEM-CAPABILITY	J-8	J-16
SYSTEM-EQUIPMENT-TYPE	J-5	J-13
SYSTEM-FUNCTION	J-5	J-13
SYSTEM-INTERFACE-DESCRIPTION {SV-1}	J-8	J-16
SYSTEM-INTERFACE-DESCRIPTION-ELEMENT	J-6	J-14
SYSTEM-INTERFACE-TYPE {JCAPS}	J-11	J-19

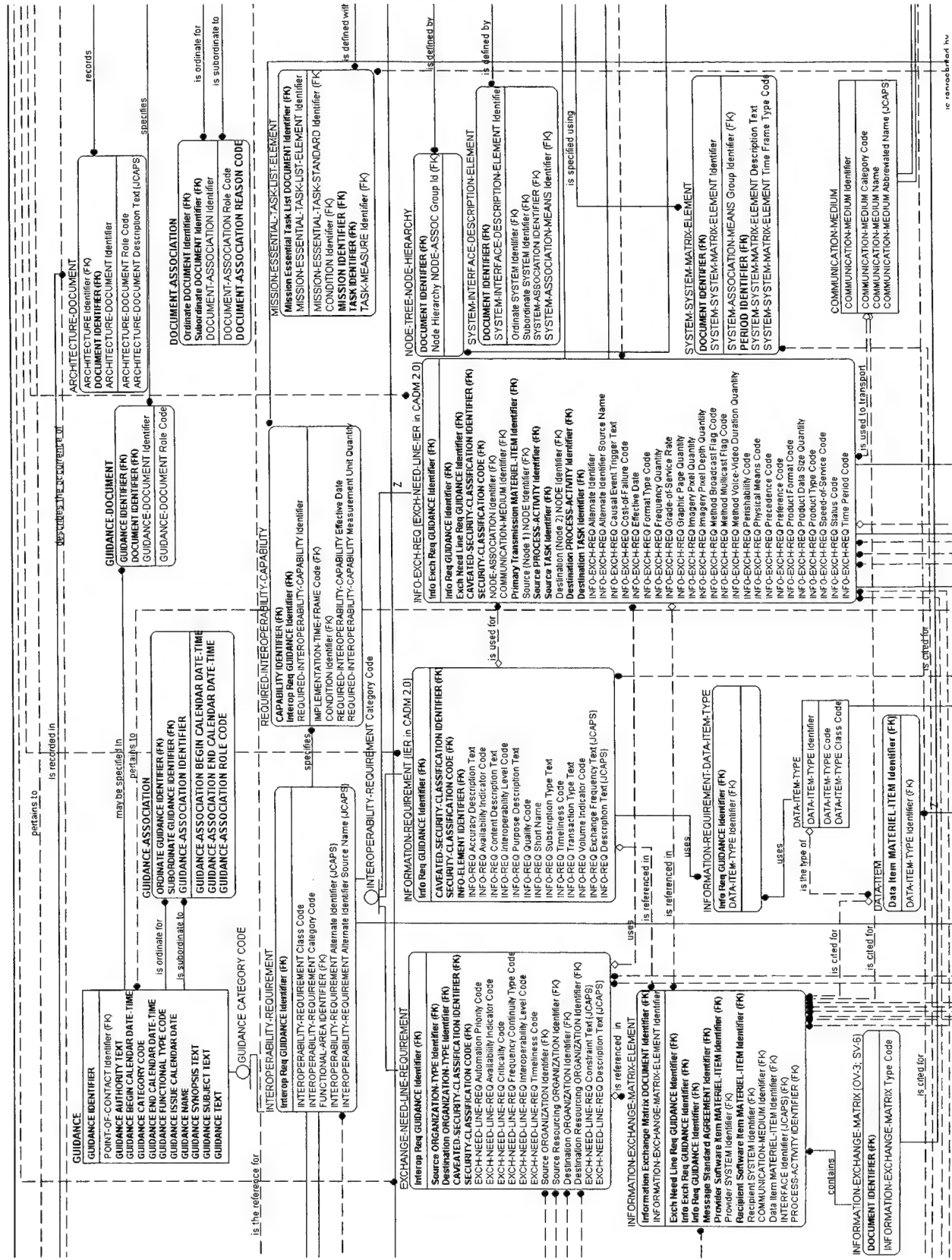
J-3

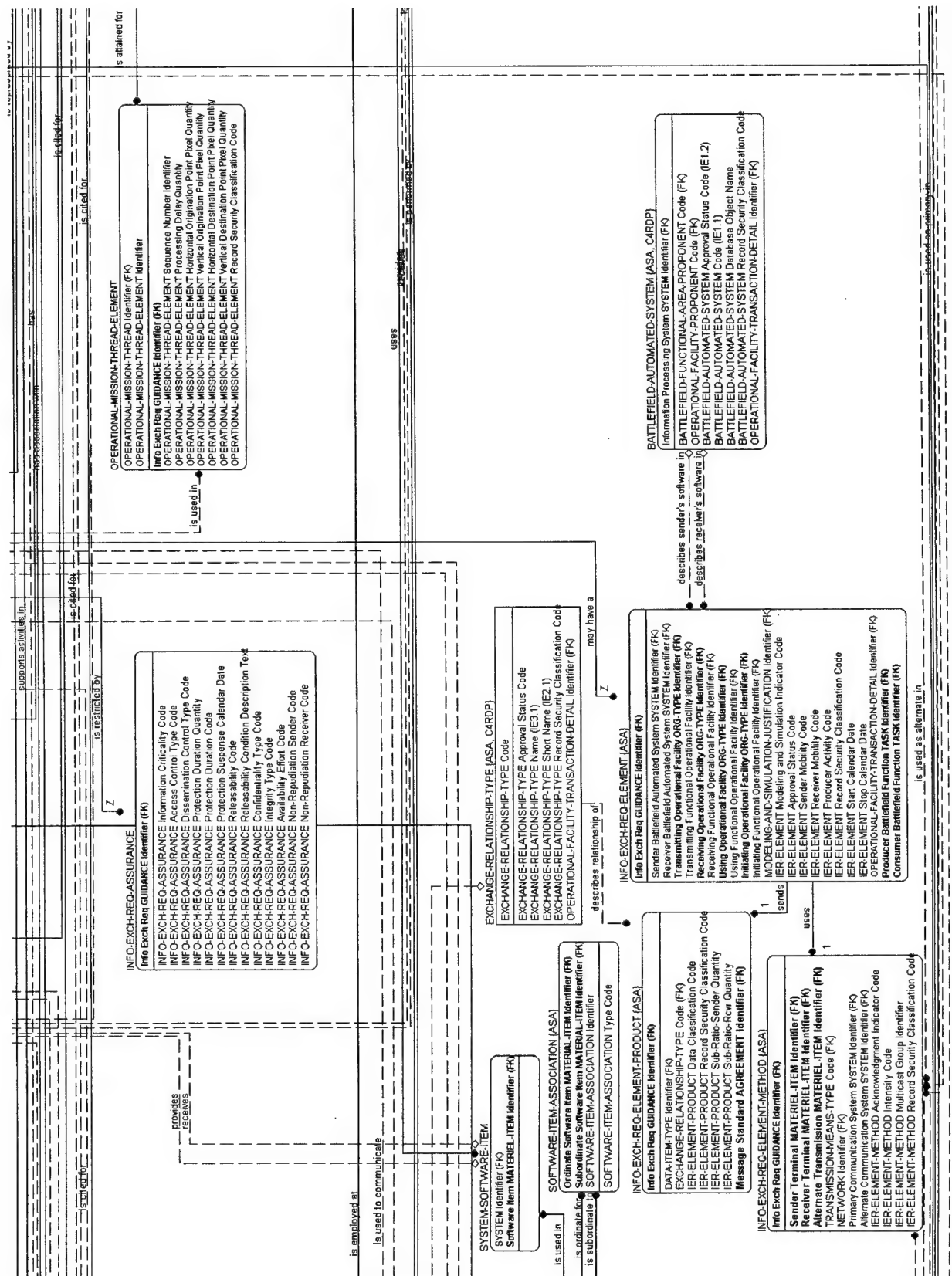
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SYSTEM-SECURITY-CLASSIFICATION	J-8	J-16
SYSTEM-SOFTWARE-ITEM	J-7	J-15
SYSTEM-SYSTEM-MATRIX {SV-3}	J-8	J-16
SYSTEM-SYSTEM-MATRIX-ELEMENT	J-6	J-14
SYSTEM-TRANSMISSION {JCAPS}	J-11	J-19
SYSTEM-TYPE	J-8	J-16
SYSTEM-TYPE-ASSOCIATION {JCAPS}	J-8	J-16
TASK	J-5	J-13
TASK-ASSOCIATION	J-5	J-13
TASK-MISSION-AREA	J-4	J-12
TECHNICAL-ARCHITECTURE	J-4	J-12
USER-DEFINED-PROPERTY {JCAPS}	J-11	J-19
USER-DEFINED-PROPERTY-Dictionary {JCAPS}	J-11	J-19
USER-DEFINED-PROPERTY-Dictionary-Enumeration {JCAPS}	J-11	J-19



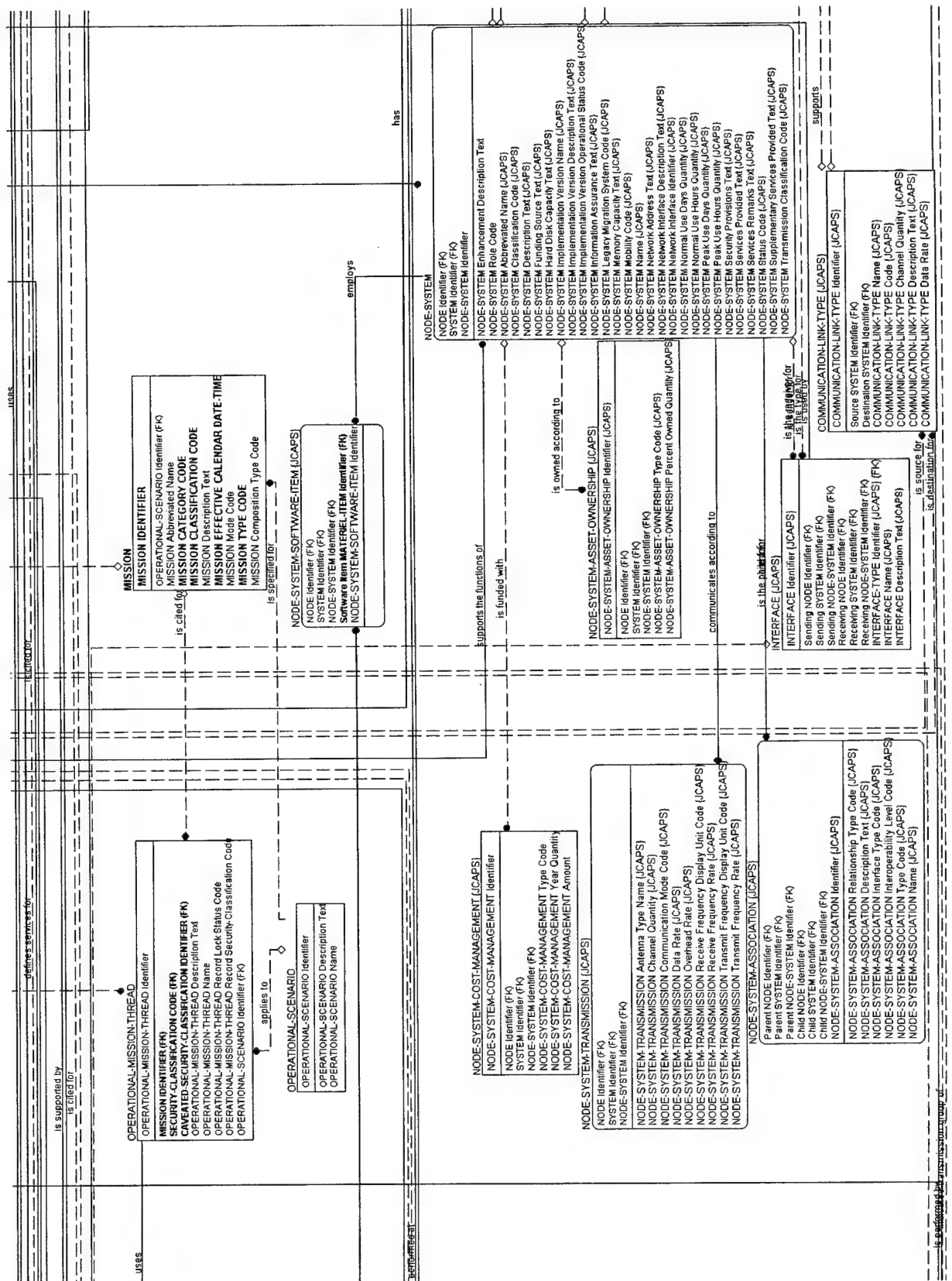


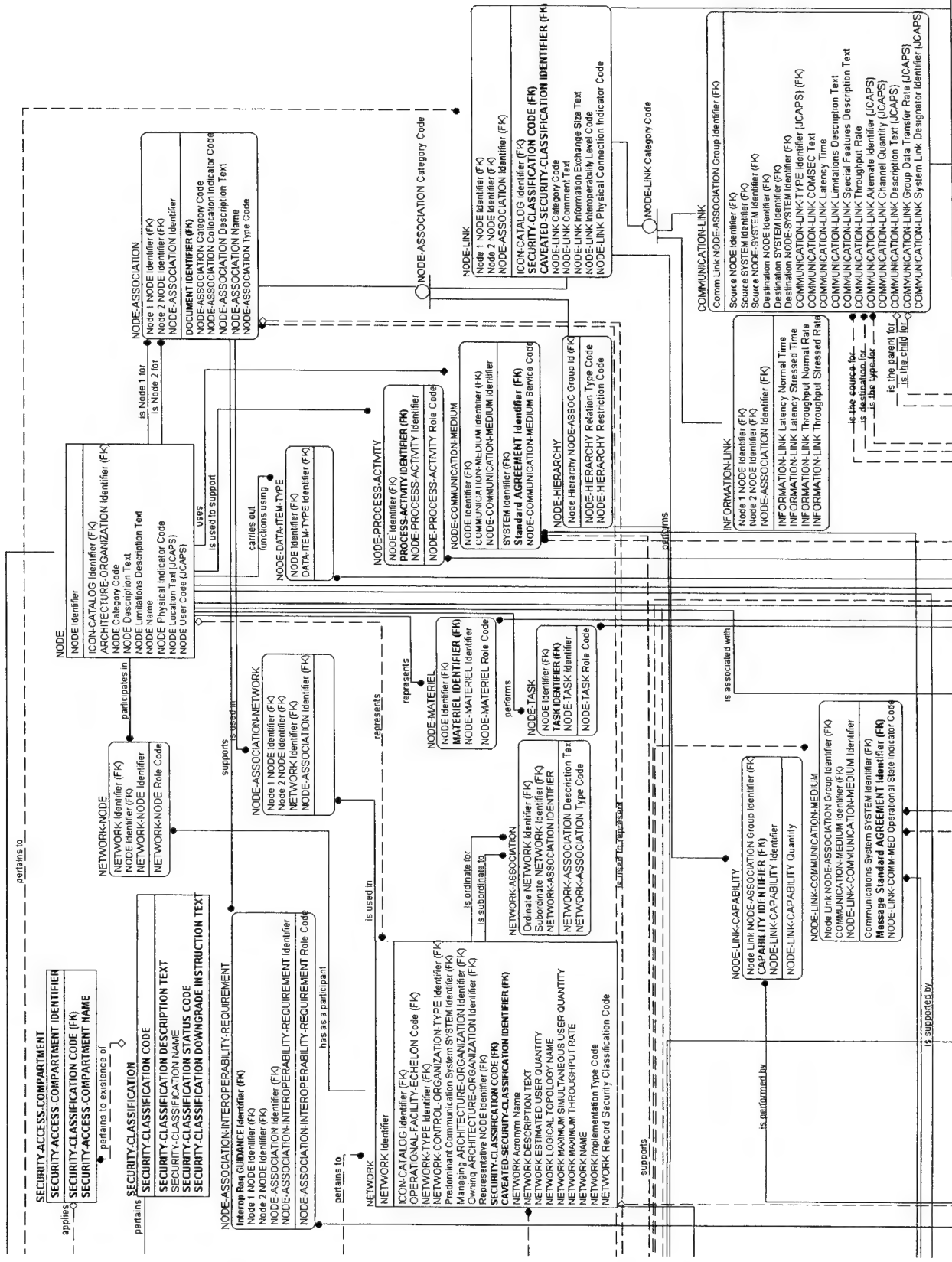
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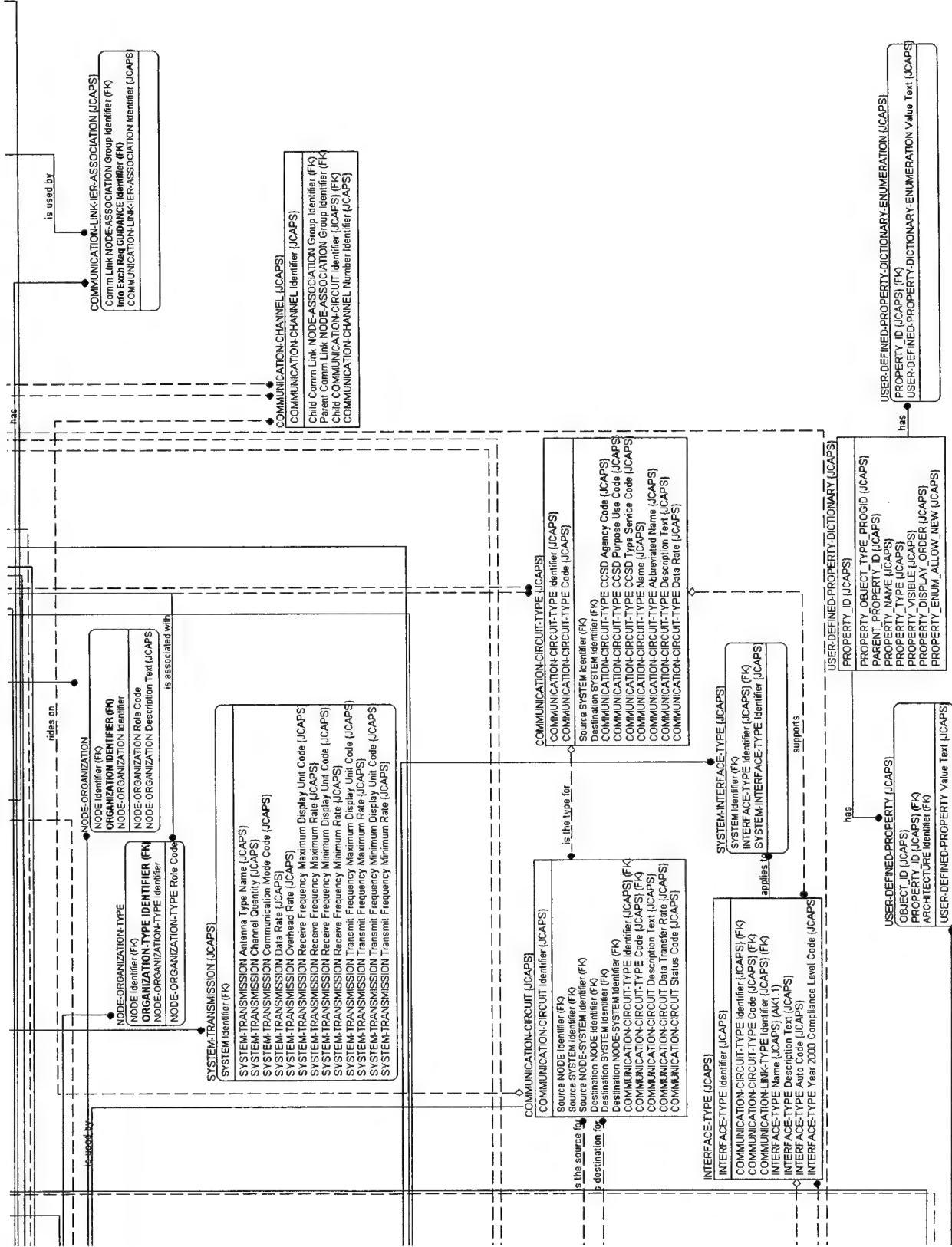


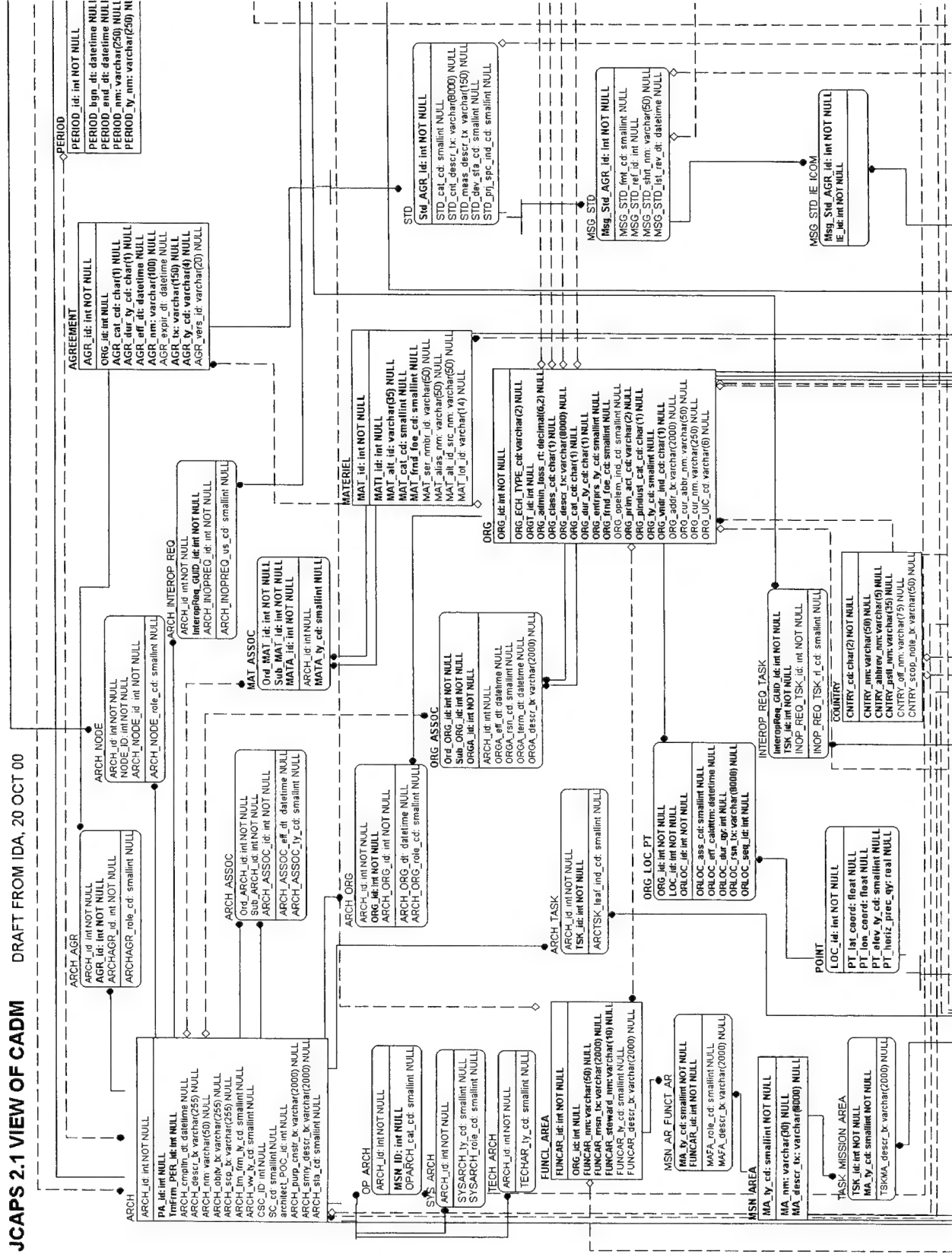


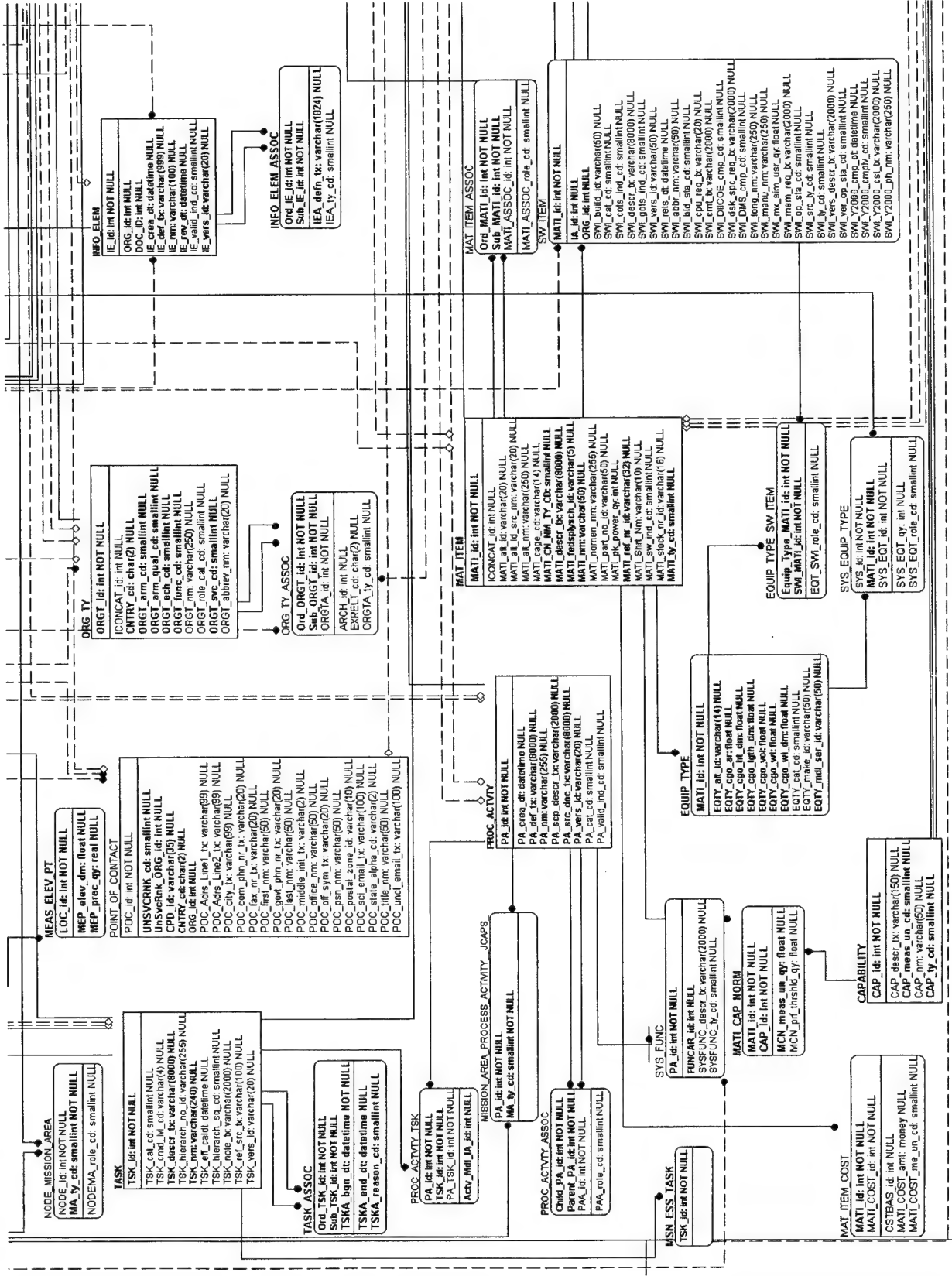
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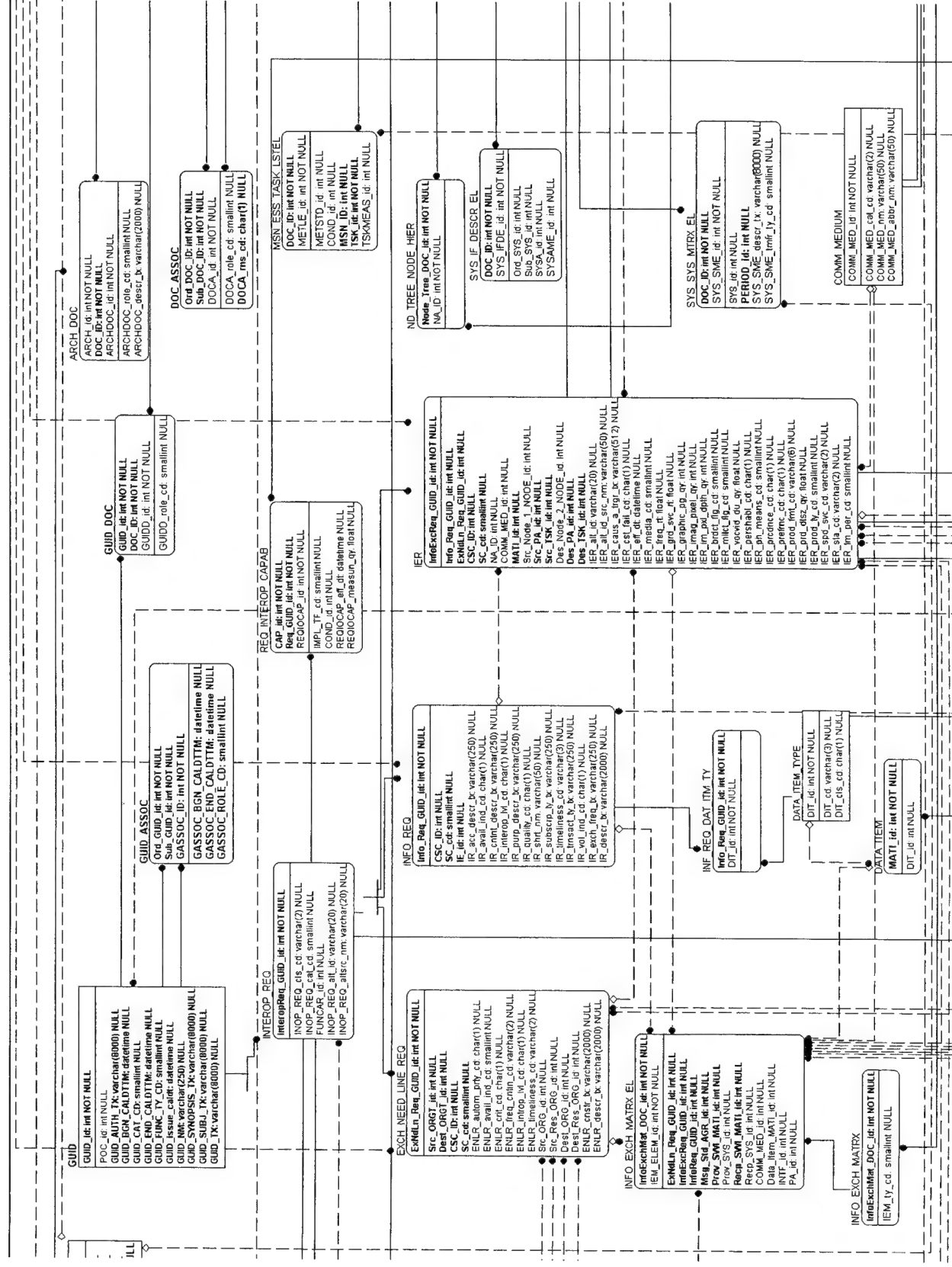


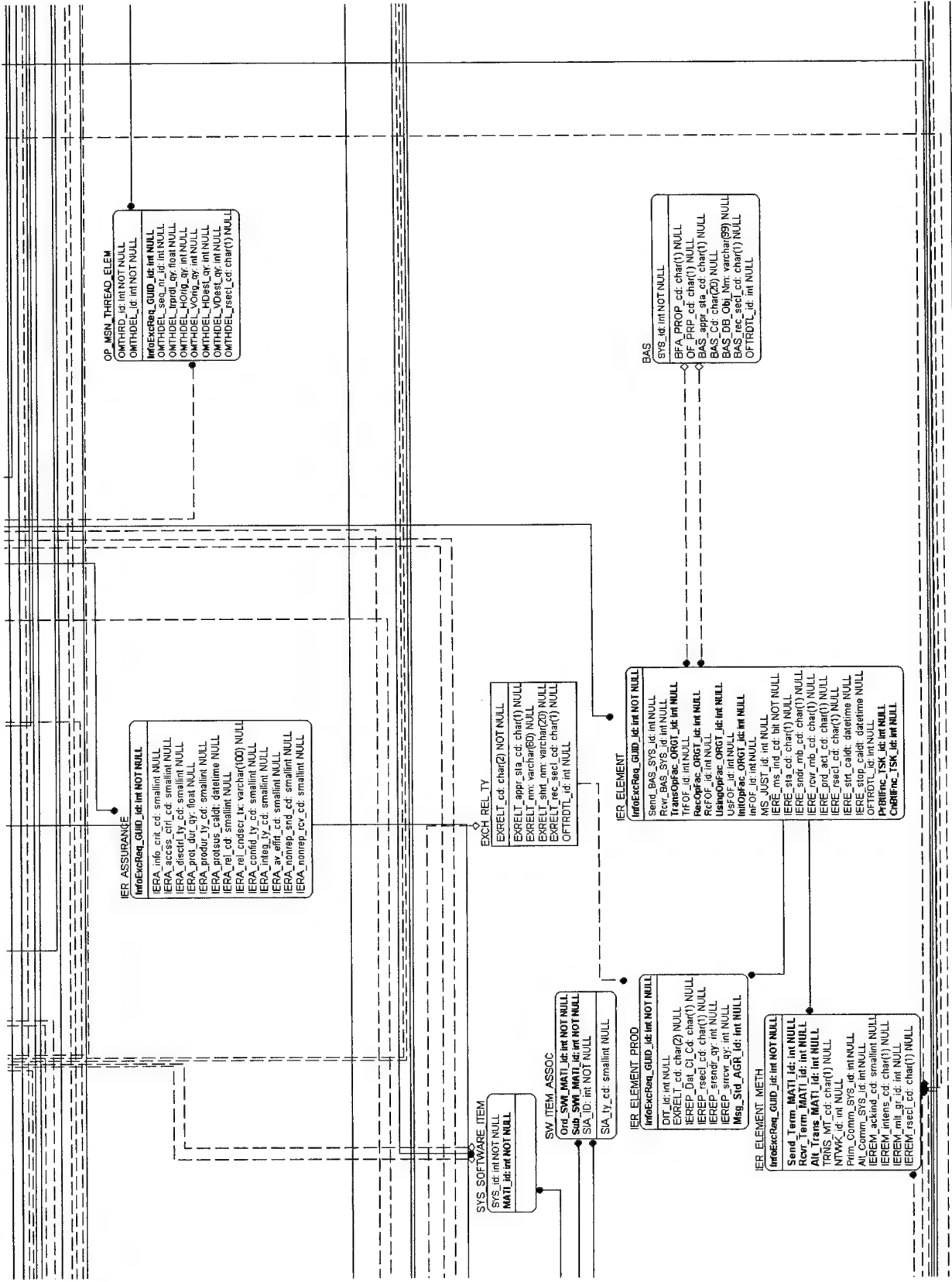


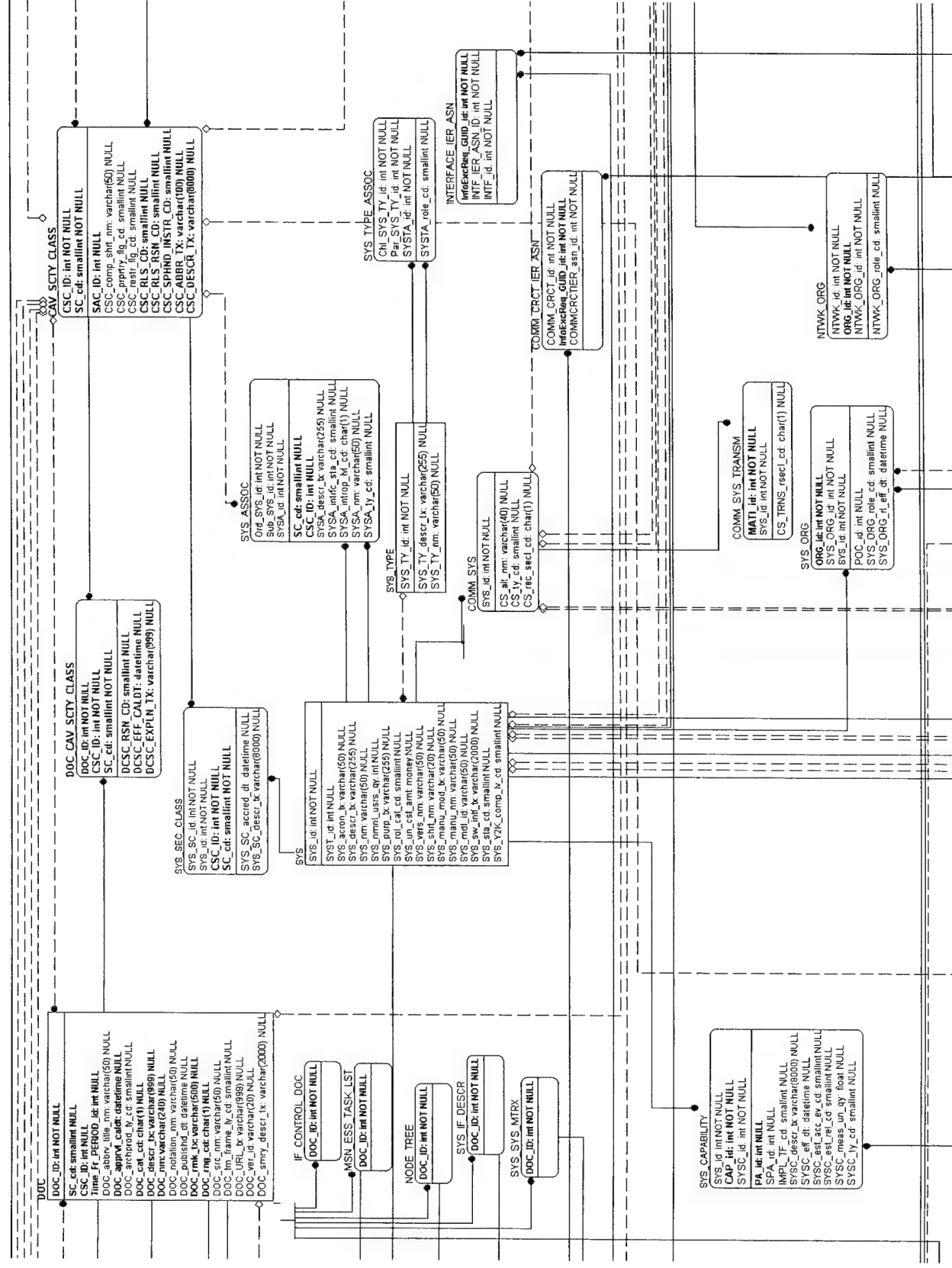


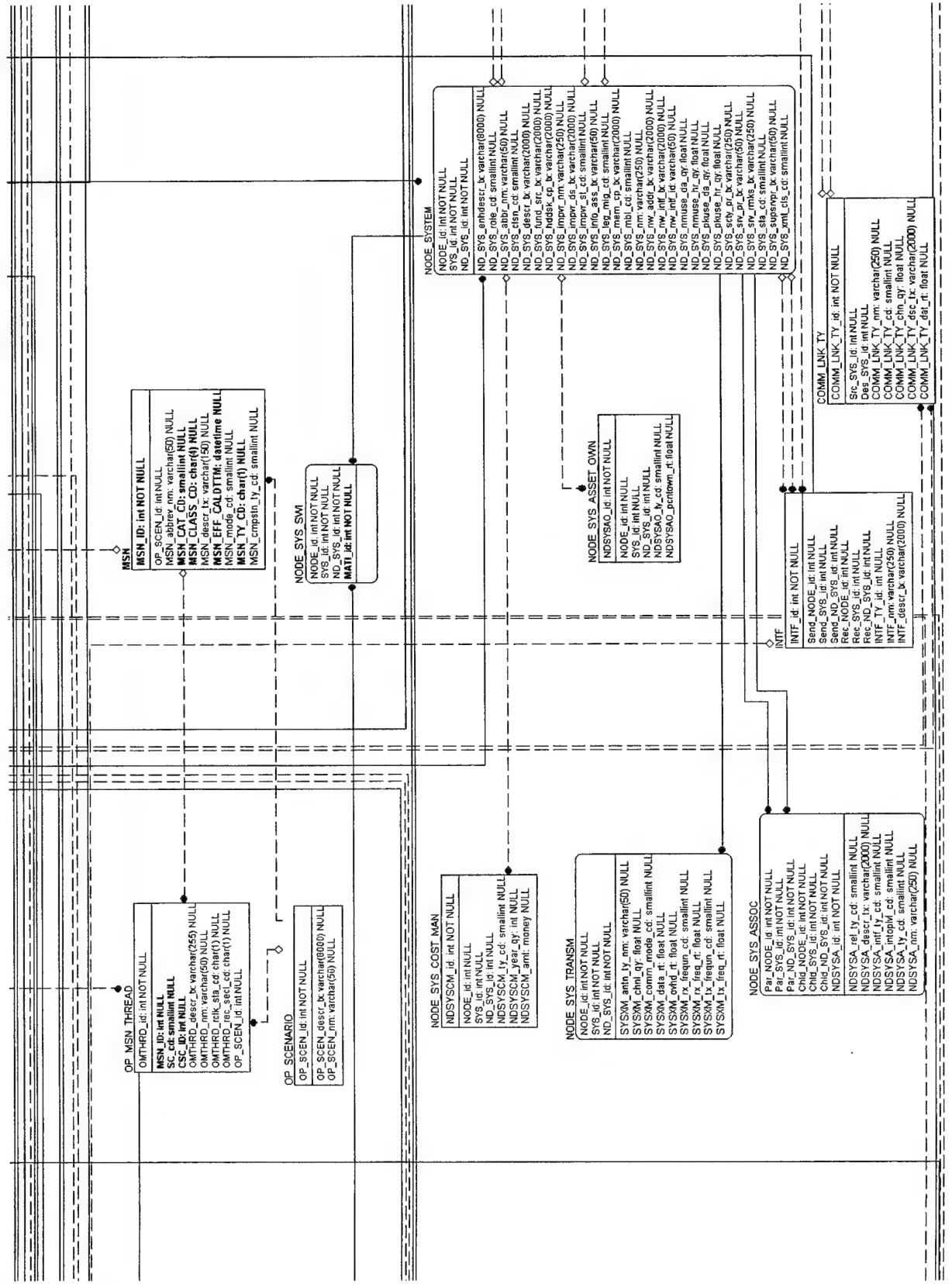


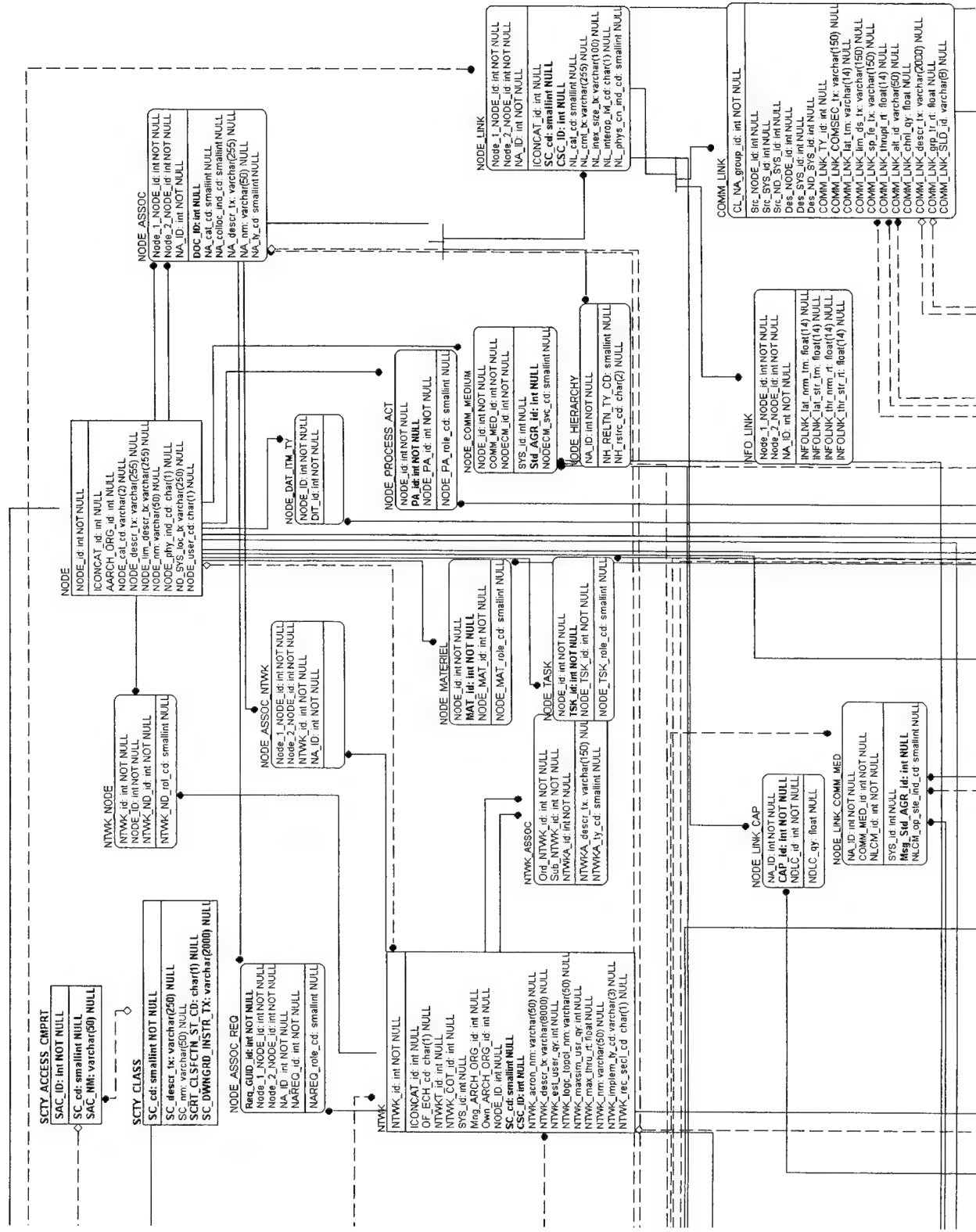




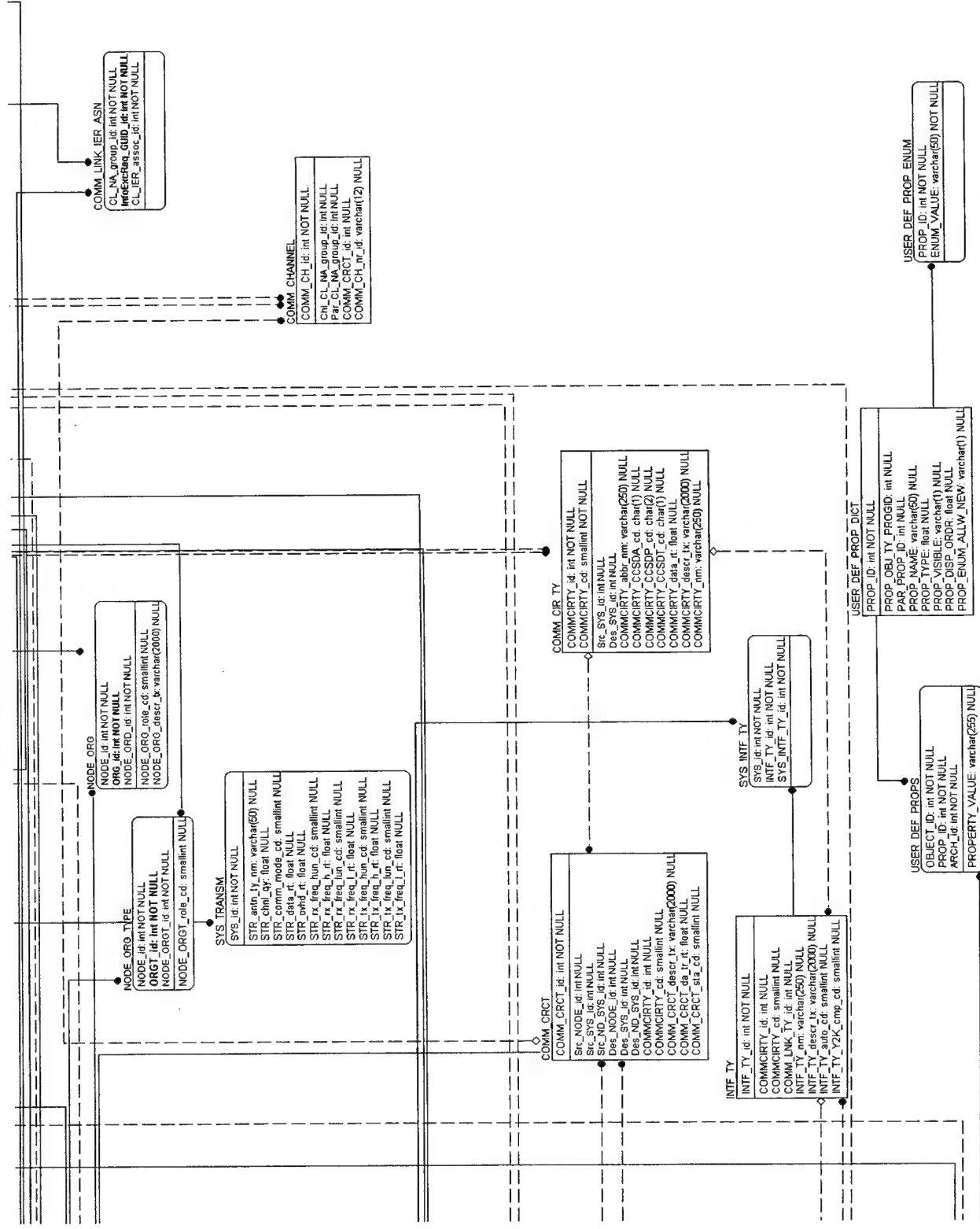








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Annex J (Physical Data Model Diagram)

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Data Model for Proposed JCAPS View of CADM

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ANNEX K. PROPOSED JCAPS ENTITY SPECIFICATIONS

Annex K (Proposed Entity Specifications)

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Proposed JCAPS View of CADM

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Table K-1. Proposed JCAPS View of CADM (143 Entities)—Entity Specifications

Entity Name	Table Name	Entity Definition	Entity Type	Entity Note
AGREEMENT	AGREEMENT	(332) (A) AN ARRANGEMENT BETWEEN PARTIES. Note: For standards and standard profiles, the standards body governing those agreements is identified as the Coordinating ORGANIZATION.	Independent	CADM 1.0.
ARCHITECTURE	ARCH	The structure of components, their relationships, and the principles and guidelines governing their design and evolution over time. [IEEE STD 610.12; C4ISR Architecture Framework, June 1996]	Independent	CADM 1.0.
ARCHITECTURE-AGREEMENT	ARCH_AGR	The relation of a specific AGREEMENT to a specific ARCHITECTURE.	Dependent	CADM 1.0
ARCHITECTURE-ASSOCIATION	ARCH ASSO C	The relationship of one ARCHITECTURE to another ARCHITECTURE.	Dependent	CADM 1.0.
ARCHITECTURE-DOCUMENT	ARCH_DOC	An association between a specific ARCHITECTURE and a specific DOCUMENT.	Dependent	CADM 1.0
ARCHITECTURE-INTEROPERABILITY-REQUIREMENT	ARCH_INTER OP_REQ	The relationship of a specific ARCHITECTURE to a specific INTEROPERABILITY-REQUIREMENT.	Dependent	CADM 1.0.
ARCHITECTURE-NODE	ARCH_NODE	The relationship of a specific ARCHITECTURE to a specific NODE.	Dependent	CADM 1.0.
ARCHITECTURE-ORGANIZATION	ARCH_ORG	The relation of a specific ARCHITECTURE to a specific ORGANIZATION.	Dependent	CADM 1.0
ARCHITECTURE-TASK	ARCH_TASK	The association of a specific ARCHITECTURE with a specific TASK.	Dependent	CADM 1.0.
BATTLEFIELD-AUTOMATED-SYSTEM (ASA, C4RDP)	BAS	A SYSTEM that manipulates and presents data. Source: CADM 1.0.	Dependent	Army CADM.
CAPABILITY	CAPABILITY	(333) (A) AN ABILITY TO ACHIEVE AN OBJECTIVE. Note (added for CADM 2.0): The performance of each CAPABILITY is measured by a single quantity.	Independent	Army CADM.
CAVEATED-SECURITY-CLASSIFICATION	CAV_SCTY_CLASS	(16225/1) (A) A SET OF RESTRICTIONS ON INFORMATION OF A SPECIFIC SECURITY-CLASSIFICATION.	Dependent	Army CADM (used in AARMS).
COMMUNICATION-CHANNEL {JCAPS}	COMM_CHA NNEL	A LOGICAL PARTITION OF A PHYSICAL DEVICE OVER WHICH COMMUNICATIONS ARE CONVEYED.	Independent	JCAPS 2.1 (COMMUNICATION-CHANNEL).
COMMUNICATION-CIRCUIT {JCAPS}	COMM_CRCT	A CIRCUIT USED FOR COMMUNICATIONS.	Independent	JCAPS 2.1 (COMMUNICATION-CIRCUIT).
COMMUNICATION-CIRCUIT-ASSOCIATION {JCAPS}	COMM_CRCT IER_ASN	THE RELATIONSHIP BETWEEN A COMMUNICATION-CIRCUIT AND AN INFORMATION EXCHANGE REQUIREMENT. Source JCAPS.	Dependent	JCAPS 2.1.
COMMUNICATION-CIRCUIT-TYPE {JCAPS}	COMM_CIR TY	A KIND OF LOGICAL CIRCUIT FOR COMMUNICATIONS.	Independent	JCAPS 2.1 (COMMUNICATION-CIRCUIT-TYPE).
COMMUNICATION-LINK	COMM_LINK	A NODE-LINK that provides a means for data transfer between two specified nodes. Defined in JCAPS 2.1 as "A CONNECTION BETWEEN TWO COMMUNICATIONS NODES."	Dependent	N/A (Future)
COMMUNICATION-LINK-ASSOCIATION {JCAPS}	COMM_LINK IER_ASN	THE RELATIONSHIP BETWEEN A COMMUNICATION-LINK AND AN INFORMATION-EXCHANGE-REQUIREMENT.	Dependent	JCAPS 2.1 (LINK-IER-ASSOCIATION).
COMMUNICATION-LINK-TYPE {JCAPS}	COMM_LINK TY	THE GENERIC TYPES OF COMMUNICATION LINKS	Independent	JCAPS 2.1 (COMMUNICATION-LINK-TYPE).
COMMUNICATION-MEDIUM	COMM_MEDI UM	A mode of data transmission. [In CADM Draft 1.0, "Specification of communications media used to connect nodes in CMA diagrams."]	Independent	CADM 1.0.

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Entity Name	Table Name	Entity Definition	Entity Type	Entity Note
COMMUNICATION-SYSTEM	COMM_SYS	A SYSTEM that provides services by way of which information can be transmitted and received. Compare: COMMUNICATION-SYSTEM--(12481/1) (D) A SYSTEM USED FOR CONVEYING INFORMATION, ESPECIALLY BY MEANS OF ELECTRONIC OR MECHANICAL TECHNIQUES.	Dependent	CADM 1.0.
COMMUNICATION-SYSTEM-TRANSMISSION (ASA, C4RDP--CELIN)	COMM_SYS_TRANS	The specification of valid COMMUNICATION-SYSTEMS for a specific communications-electronic MATERIEL-ITEM. Source: C4RDP.	Dependent	Army CADM.
COUNTRY	COUNTRY	(39) (A) A NATION OF THE WORLD.	Independent	Army CADM (from DoD Data Model and C2 Core Data Model).
DATA-ITEM	DATA_ITEM	A MATERIEL-ITEM representing an instance of information.	Dependent	CADM 1.0
DATA-ITEM-TYPE	DATA_ITEM_TYPE	A class of information of military interest.	Independent	CADM 1.0.
DOCUMENT	DOC	(119/1) (A) RECORDED INFORMATION REGARDLESS OF PHYSICAL FORM.	Independent	CADM 1.0.
DOCUMENT-ASSOCIATION	DOC_ASSOC	(327/1) (A) AN ASSOCIATION BETWEEN A DOCUMENT AND ANOTHER DOCUMENT.	Dependent	CADM 1.0.
DOCUMENT-CAVEATED-SECURITY-CLASSIFICATION	DOC_CAV_SCTY_CLASS	The association of a DOCUMENT with a CAVEATED-CLASSIFICATION-CLASSIFICATION.	Dependent	Army CADM.
EQUIPMENT-TYPE	EQUIP_TYPE	(43) (A) A CATEGORIZATION OF MATERIEL-ITEM THAT PROVIDES CAPABILITY THROUGH REPEATED USE.	Dependent	CADM 1.0.
EQUIPMENT-TYPE-SOFTWARE-ITEM	EQUIP_TYPE_SW_ITEM	The relationship between a specific EQUIPMENT-TYPE and a specific SOFTWARE-ITEM.	Dependent	CADM 1.0.
EXCHANGE-NEED-LINE-REQUIREMENT	EXCH_NEED_LINE_REQ	A REQUIREMENT that is the logical expression of the need to transfer information among nodes (e.g., operational elements, system elements). [The content of the transfer(s) is specified by reference to IER(s).] [In CADM Draft 1.0, A REQUIREMENT that is the logical expression of the need to transfer information (whose content is specified by reference to INFORMATION-EXCHANGE-REQUIREMENT) among operational elements (ORGANIZATIONS or ORGANIZATION-TYPES) that references related tasks, the providing node/operational element, and the receiving node/operational element.]	Dependent	CADM 1.0.
EXCHANGE-RELATIONSHIP-TYPE (ASA, C4RDP)	EXCH_REL_TY	The specification of a class of pairing for information exchange. Source: C4RDP.	Independent	Army CADM.
FUNCTIONAL-AREA	FUNCL_AREA	(4198) (A) A MAJOR AREA OF RELATED ACTIVITY.	Independent	CADM 1.0.
GUIDANCE	GUID	(336/3) (A) A STATEMENT OF DIRECTION RECEIVED FROM A HIGHER ECHELON.	Independent	CADM 1.0.
GUIDANCE-ASSOCIATION	GUID ASSO	(1691/1) (A) AN ASSOCIATION OF A SPECIFIC GUIDANCE WITH ANOTHER SPECIFIC GUIDANCE.	Dependent	CADM 1.0.
GUIDANCE-DOCUMENT	GUID_DOC	(2339) (A) THE ASSOCIATION BETWEEN A GUIDANCE AND A DOCUMENT.	Dependent	CADM 1.0
INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	IER	A REQUIREMENT for information to be passed between and among forces, organizations, or administrative structures concerning ongoing activities. Note: INFORMATION-EXCHANGE-REQUIREMENTS identify who exchanges what information with whom, as well as why the information is necessary and how that information will be used. The quality (i.e. frequency, timeliness, security) and quantity (i.e., volume, speed, and type of information such as data, voice, and video) are attributes of the information exchange included in the information exchange requirement. Source: CJCSI 6212.01B (Rev 2, 20 Oct 99).	Dependent Dependent	CADM 1.0 CADM 2.0.

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Entity Name	Table Name	Entity Definition	Entity Type	Entity Note
INFO-EXCH-REQ-ASSURANCE {ASA}	IER_ASSURANCE	The sensitivities and properties of an INFORMATION-EXCHANGE-REQUIREMENT needed to ensure that the information is protected and occurs between and only between the designated Source and the designated Recipient. Source: Information Assurance Architecture Working Group, December 1999.	Dependent	Army CADM (Information Security).
INFO-EXCH-REQ-ELEMENT {ASA}	IER_ELEMENT	An element (person or equipment) involved in the requirements necessary to exchange information between two or more communicating entities for a specific INFORMATION-EXCHANGE-REQUIREMENT.	Dependent	Army CADM (ASA; C4RDP).
INFO-EXCH-REQ-ELEMENT-METHOD {ASA}	IER_ELEMENT_T_METH	The method by which two or more communicating entities exchange information for a specific INFORMATION-EXCHANGE-REQUIREMENT. Source: C4RDP.	Dependent	Army CADM (ASA; C4RDP).
INFO-EXCH-REQ-ELEMENT-PRODUCT {ASA}	IER_ELEMENT_T_PROD	The arrangement of information that is exchanged between two or more communicating entities for a specific INFORMATION-EXCHANGE-REQUIREMENT. Source: C4RDP.	Dependent	Army CADM (ASA; C4RDP).
INFORMATION-ELEMENT	INFO_ELEM	A representation of data subject to exchange. Note: These data include data that represent a mechanism such as that used in IDEFO activity models. Further, a message may include one or more instances of INFORMATION-ELEMENT. Recommended in CADM 2.0 to replace ICOM--(4199) (A) MATERIAL RELATED TO ONE OR MORE ACTIVITY-MODEL-PROCESS-ACTIVITIES.	Independent	CADM 1.0.
INFORMATION-ELEMENT-ASSOCIATION	INFO_ELEM_ASSOC	(4202) (A) THE ASSOCIATION OF ONE INFORMATION-ELEMENT [formerly ICOM] TO ANOTHER INFORMATION-ELEMENT.	Dependent	CADM 1.0.
INFORMATION-EXCHANGE-MATRIX {OV-3; SV-6}	INFO_EXCH_MATRIX	A tabular form of requirements to transfer information between pairs of objects (e.g., units, nodes).	Dependent	CADM 1.0.
INFORMATION-EXCHANGE-MATRIX-ELEMENT	INFO_EXCH_MATRIX_EL	A specification for how an Information Exchange Requirement (IER) and an Exchange Need Line Requirement are related in a specific context of tasks being performed with information systems support.	Dependent	CADM 2.0.
INFORMATION-LINK	INFO_LINK	A NODE-LINK that provides a means for information exchange between two specified NODES.	Dependent	N/A (Future)
INFORMATION-REQUIREMENT {IER in CADM 2.0}	INFO_REQ	A REQUIREMENT for the content of an information flow. Note: Associated with an IER are such performance attributes as information size, throughput, timeliness, quality, and quantity values.	Dependent	CADM 1.0.
INFORMATION-REQUIREMENT-DATA-ITEM-TYPE	INF_REQ_DATA_ITM_TY	The relationship of a specific INFORMATION-REQUIREMENT to a specific DATA-ITEM-TYPE.	Dependent	CADM 1.0.
INTERFACE {JCAPS}	INTF	A GENERIC CONNECTION BETWEEN C2E'S (OPFAC'S) OR SYSTEMS	Independent	JCAPS 2.1 (INTERFACE).
INTERFACE-CONTROL-DOCUMENT	IF_CONTROL_DOC	The statement of requirements for the effective exchange of information or services between two objects (e.g., system elements).	Dependent	CADM 1.0
INTERFACE-IER-ASSOCIATION {JCAPS}	INTERFACE_IER_ASN	THE RELATIONSHIP BETWEEN AN INTERFACE AND INFORMATION EXCHANGE REQUIREMENT	Dependent	JCAPS 2.1 (INTERFACE-IER-ASSOCIATION).
INTERFACE-TYPE {JCAPS}	INTF_TY	THE GENERIC TYPE OF INTERFACE. Source: JCAPS.	Independent	JCAPS 2.1 (INTERFACE-TYPE).
INTEROPERABILITY-REQUIREMENT	INTEROP_REQ	GUIDANCE that specifies a need or demand for interoperation. Compare: REQUIREMENT--(12451/1) (D) A NEED OR DEMAND. Note: Basic Interoperability is the exchange of information that preserves the meaning and relationships of the information exchanged (ATCCIS WP24, Architecture Definition, 20 September 1990).	Dependent	CADM 1.0.
INTEROPERABILITY-REQUIREMENT-TASK	INTEROP_REQ_TASK	The association of a specific TASK to a specific INTEROPERABILITY-REQUIREMENT.	Dependent	CADM 1.0.

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Entity Name	Table Name	Entity Definition	Entity Type	Entity Note
MATERIEL (ASA, C2 Core)	MATERIEL	(337) (A) AN OBJECT OF INTEREST THAT IS NON-HUMAN, MOBILE, AND PHYSICAL.	Independent	Army CADM (ASA; AOA) and C2 Core.
MATERIEL-ASSOCIATION (ASA, C2 Core)	MAT_ASSOC	(1028) (A) THE ASSOCIATION OF A MATERIEL TO ANOTHER MATERIEL.	Dependent	Army CADM (ASA; AOA) and C2 Core.
MATERIEL-ITEM	MAT_ITEM	(787) (A) A CHARACTERIZATION OF A MATERIEL ASSET.	Independent	CADM 1.0 (C2 Core).
MATERIEL-ITEM-ASSOCIATION	MAT_ITEM_A_SSO	The association of one MATERIEL-ITEM with another.	Dependent	Army CADM.
MATERIEL-ITEM-CAPABILITY-NORM	MAT_CAP_NORM	(1069/2) (A) A STANDARD ABILITY CONSIDERED TO BE TYPICAL OF A MATERIEL-ITEM TO ACHIEVE A SPECIFIED OBJECTIVE.	Dependent	CADM 1.0 (C2 Core).
MATERIEL-ITEM-COST	MAT_ITEM_COST	The estimated cost of acquiring and installing a specific MATERIEL-ITEM. Source: I3A Workshop at IDA, 12 January 2000.	Dependent	Army CADM (I3A Workshop at IDA, 11-12 Jan 2000).
MEASURED-ELEVATION-POINT	MEAS_ELEV_PT	(935) (A) A POINT WITH AN ELEVATION REFERENCED TO WORLD GEODETIC SYSTEM 84 (WGS 84) VERTICAL DATUM.	Dependent	Army CADM (from DoD Data Model and C2 Core Data Model).
MESSAGE-STANDARD	MSG_STD	A standard for the syntax of a set of elements of data for exchange between information systems. Compare: MESSAGE--(12162/1) (D) A STANDARDIZED DOCUMENT USED TO CONVEY INFORMATION.	Dependent	CADM 1.0.
MESSAGE-STANDARD-INFORMATION-ELEMENT	MSG_STD_IE_ICOM	An association of a specific MESSAGE-STANDARD with a specific INFORMATION-ELEMENT.	Dependent	CADM 2.0.
MISSION	MSN	(1/3) (A) THE TASK, TOGETHER WITH THE PURPOSE, THAT CLEARLY INDICATES THE ACTION TO BE TAKEN. Note 1: Multiple tasks accomplish a mission. (SPAWAR) Note 2: An extension of DDDS (1/1) (A) AN OBJECTIVE.	Independent	CADM 1.0.
MISSION-AREA	MSN_AREA	(2305) (A) THE GENERAL CLASS TO WHICH AN OPERATIONAL MISSION BELONGS. Note: Within a class, the missions have common objectives.	Independent	CADM 1.0.
MISSION-AREA-FUNCTIONAL-AREA	MSN_AR_FU_NCT_AR	An association between a specific MISSION-AREA and a specific FUNCTIONAL-AREA.	Dependent	CADM 1.0
MISSION-AREA-PROCESS-ACTIVITY (JCAPS)	MSN_AR_PR_OC_ACTY	The association of a MISSION-AREA to a PROCESS-ACTIVITY.	Dependent	Suggested by DON CIA for JCAPS Migration.
MISSION-ESSENTIAL-TASK	MSN_ESS_TASK	(2307) (A) A TASK REQUIRED FOR THE ACCOMPLISHMENT OF A MISSION. Compare the definition of Joint Mission Essential Task (JMET) [CJCSM 3500.04A, 13 September 1996]: "A TASK selected by a joint force commander from the Universal Joint Task List (UJTL) deemed essential to mission accomplishment." A supporting task is defined [CJCSM 3500.04A, 13 September 1996] as: "Specific activities that contribute to the accomplishment of a joint mission essential task. Supporting tasks are accomplished at the same command level or by subordinate elements of a joint force (i.e., joint staff, functional components, etc.)." Command-linked tasks are defined [CJCSM 3500.04A, 13 September 1996] as "TASKS that depict the seams between supported and supporting commands. Command-linked TASKS are key to the accomplishment of command or agency JMETs."	Dependent	CADM 1.0 (C2 Core).
MISSION-ESSENTIAL-TASK-LIST	MSN_ESS_TASK_LST	A list of TASKS considered critical to the accomplishment of assigned or anticipated MISSIONS that may be associated with specific conditions and performance standards and may identify command-linked and supporting TASKS. [CJCSM 3500.04A, 13 September 1996].	Dependent	CADM 1.0

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Entity Name	Table Name	Entity Definition	Entity Type	Entity Note
MISSION-ESSENTIAL-TASK-LIST-ELEMENT	MSN_ESS_TASK_LISTEL	An entry for a specific MISSION-ESSENTIAL-TASK-LIST.	Dependent	CADM 1.0
NETWORK	NTWK	The joining of two or more nodes for a specific purpose. [In CADM Draft 1.0, (10972) (D) THE JOINING OF TWO OR MORE COMPONENTS FOR THE PURPOSE OF EXCHANGING VERBAL, NON-VERBAL, OR ELECTRONIC COMMUNICATIONS OR TRANSPORTING PERSONNEL, EQUIPMENT, OR OTHER RESOURCES.] AN ASSOCIATION OF A NETWORK WITH ANOTHER NETWORK.	Independent	CADM 1.0.
NETWORK-ASSOCIATION	NTWK ASSO C	The relationship of a specific NETWORK to a specific NODE. Compare: NETWORK-FUNCTIONAL-NODE--(11201/1) (D) DATA THAT IDENTIFIES THE PARTICIPANTS ON A COMMUNICATION NETWORK. Compare: NETWORK-PHYSICAL-NODE--(11221/1) (D) INFORMATION DESCRIBING A SPECIFIC POINT ON A PHYSICAL NETWORK.	Dependent	CADM 1.0.
NETWORK-NODE	NTWK_NODE	The association of a specific NETWORK to a specific ORGANIZATION.	Dependent	CADM 1.0.
NETWORK-ORGANIZATION	NTWK_ORG	A representation of an element of architecture that produces, consumes, or processes data. Compare: NODE--(956/1) (D) A ZERO-DIMENSIONAL TOPOLOGICAL PRIMITIVE THAT DEFINES TOPOLOGICAL RELATIONSHIPS. Compare (JCS Pub 1-02): Node--A location in a mobility system where a movement requirement originated, processed for onward movement, or terminated.] An association of one specific NODE to another NODE. For need lines, Node 1 represents the source and Node 2 represents the destination.	Dependent	CADM 1.0.
NODE	NODE	The association of a specific NODE-ASSOCIATION to a specific INTEROPERABILITY-REQUIREMENT.	Independent	CADM 1.0.
NODE-ASSOCIATION	NODE ASSO C	A relationship of a specific NODE-ASSOCIATION to a specific NETWORK.	Dependent	CADM 1.0.
NODE-ASSOCIATION-INTEROPERABILITY-REQUIREMENT	NODE ASSO C_REQ	The association of a specific NODE with a specific COMMUNICATION-MEDIUM.	Dependent	CADM 1.0.
NODE-ASSOCIATION-NETWORK	NODE ASSO C_NTWK	The association of a specific NODE with a specific DATA-ITEM-TYPE.	Dependent	CADM 1.0.
NODE-COMMUNICATION-MEDIUM	NODE_COM M_MEDIUM	A NODE-ASSOCIATION that specifies a functional or operational relationship between two NODES.	Dependent	CADM 1.0.
NODE-DATA-ITEM-TYPE	NODE_DAT_I TM_TY	A NODE-ASSOCIATION that provides the capability to transfer data or to exchange information between two specific NODES.	Dependent	CADM 1.0.
NODE-HIERARCHY	NODE_HIERA RCHY	The measure of a specific CAPABILITY for a specific NODE-LINK.	Dependent	CADM 1.0.
NODE-LINK	NODE_LINK	The association of a specific NODE-LINK with a specific COMMUNICATION-MEDIUM.	Dependent	CADM 1.0.
NODE-LINK-CAPABILITY	NODE_LINK_ CAP	The association of a specific NODE with a specific instance of MATERIEL.	Dependent	Army CADM.
NODE-LINK-COMMUNICATION-MEDIUM	NODE_LINK_ COMM_MED	The association of a specific NODE with a specific MISSION-AREA.	Dependent	CADM 1.0.
NODE-MATERIEL	NODE_MATE RIEL	The association of a specific NODE with a specific ORGANIZATION.	Dependent	CADM 1.0.
NODE-MISSION-AREA	NODE_MISSI ON_AREA	The association of a specific NODE with a specific ORGANIZATION-TYPE.	Dependent	CADM 1.0.
NODE-ORGANIZATION	NODE_ORG	The association of a specific NODE with a specific PROCESS-ACTIVITY.	Dependent	CADM 1.0.
NODE-ORGANIZATION-TYPE	NODE_ORG_ TYPE		Dependent	
NODE-PROCESS-ACTIVITY	NODE_PROC ESS_ACT		Dependent	

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Entity Name	Table Name	Entity Definition	Entity Type	Entity Note
NODE-SYSTEM	NODE_SYST EM	The association of a specific NODE with a specific SYSTEM.	Dependent	CADM 1.0.
NODE-SYSTEM-ASSET- OWNERSHIP {JCAPS}	NODE_SYS_ ASSET_OWN	THE DESCRIPTION AND PERCENTAGE OF OWNERSHIP OF A NODE-SYSTEM. Source: JCAPS.	Independent	JCAPS 2.1 (ASSET- OWNERSHIP).
NODE-SYSTEM-ASSOCIATION {JCAPS}	NODE_SYS_ ASSOC	AN ASSOCIATION OF A NODE-SYSTEM WITH ANOTHER NODE-SYSTEM.	Dependent	JCAPS 2.1 (SYSTEM- ASSOCIATION).
NODE-SYSTEM-COST- MANAGEMENT {JCAPS}	NODE_SYS_ COST_MAN	THE DOLLAR AMOUNTS ASSOCIATED WITH VARIOUS ASPECTS OF THE MANAGEMENT OF A NODE-SYSTEM BY TIME PERIOD	Independent	JCAPS 2.1 (COST- MANAGEMENT).
NODE-SYSTEM-SOFTWARE- ITEM {JCAPS}	NODE_SYS_ SWI	THE RELATIONSHIP BETWEEN SYSTEM AND SOFTWARE ITEM VERSION	Dependent	JCAPS 2.1 (SYSTEM- SOFTWARE-ITEM).
NODE-SYSTEM- TRANSMISSION {JCAPS}	NODE_SYS_ TRANSM	THE TRANSMISSION INFORMATION ASSOCIATED WITH A SPECIFIC NODE- SYSTEM. Source: JCAPS.	Dependent	JCAPS 2.1 (SYSTEM- TRANSMISSION- INFO).
NODE-TASK	NODE_TASK	The relationship of a specific NODE to a specific TASK.	Dependent	CADM 1.0.
NODE-TREE	NODE_TREE	A formal specification of the relationships among NODEs. Note: The NODEs may represent tasks for a specific ACTIVITY-MODEL.	Dependent	CADM 1.0.
NODE-TREE-NODE- HIERARCHY	ND_TREE_N ODE_HIER	The relationship of a specific NODE-TREE to a specific NODE-HIERARCHY.	Dependent	CADM 1.0.
OPERATIONAL- ARCHITECTURE	OP_ARCH	Descriptions of the tasks, operational elements, and information flows required to accomplish or support a warfighting function. [C4ISR Architecture Framework, June 1996]	Dependent	CADM 1.0.
OPERATIONAL-MISSION- THREAD	OP_MSN_TH READ	An identified information exchange procedure to support task execution by information systems and OPFACs. Source: Army Systems Architecture Data Model.	Independent	CADM 2.0 (ASA).
OPERATIONAL-MISSION- THREAD-ELEMENT	OP_MSN_TH READ_ELEM	The hierarchical sequence of information exchange in support of the triggered task. Source: Army Systems Architecture Data Model.	Dependent	CADM 2.0 (ASA).
OPERATIONAL-SCENARIO	OP_SCENARI O	A sequence of possible events and actions.	Independent	CADM 1.0.
ORGANIZATION	ORG	(345) (A) AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	Independent	CADM 1.0 (C2 Core).
ORGANIZATION-ASSOCIATION	ORG_ASSOC	(1077/1) (A) AN ASSOCIATION OF AN ORGANIZATION WITH ANOTHER ORGANIZATION.	Dependent	CADM 1.0 (C2 Core).
ORGANIZATION-LOCATION- POINT	ORG_LOC_P T	THE ASSOCIATION OF A POINT WITH AN ORGANIZATION.	Dependent	Army CADM (I3A Workshop 22-23 Nov 99).
ORGANIZATION-TYPE	ORG_TY	(892/2) (A) A CLASS OF ORGANIZATIONS.	Independent	CADM 1.0 (C2 Core).
ORGANIZATION-TYPE- ASSOCIATION {ASA}	ORG_TY_AS SOC	(9211/1) THE ASSOCIATION OF AN ORGANIZATION-TYPE WITH ANOTHER ORGANIZATION-TYPE.	Dependent	CADM 2.0 (ASA).
PERIOD	PERIOD	(1321) (A) INTERVAL OF TIME.	Independent	CADM 2.0.
POINT	POINT	(934) (A) A ZERO DIMENSIONAL GEOMETRIC-SPATIAL-ELEMENT.	Dependent	Army CADM (from DoD Data Model and C2 Core Data Model).

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Entity Name	Table Name	Entity Definition	Entity Type	Entity Note
POINT-OF-CONTACT	POINT_OF_C ONTACT	A reference to a position for obtaining information. Compare CONTACT--(16303/1) (D)--A KNOWLEDGEABLE INDIVIDUAL OR ORGANIZATION. NOTE for 16303: A RESPONSIBLE PARTY IS A PERSON AND/OR AN ORGANIZATION THAT ACTS AS A POINT OF CONTACT FOR A PARTICULAR SUBJECT.	Independent	CADM 2.0 (SIMO).
PROCESS-ACTIVITY	PROC_ACTIV TY	(4204/2) (A) THE REPRESENTATION OF A MEANS BY WHICH A PROCESS ACTS ON SOME INPUT TO PRODUCE A SPECIFIC OUTPUT. (DDDS, June 1998)	Independent	CADM 1.0.
PROCESS-ACTIVITY- ASSOCIATION {JCAPS}	PROC_ACTIV TY_ASSOC	The relationship of one PROCESS-ACTIVITY to another PROCESS-ACTIVITY, independent of any activity model.	Dependent	JCAPS 2.1 (PROCESS- ACTIVITY DERIVATION).
PROCESS-ACTIVITY-TASK	PROC_ACTIV TY_TSK	The association of a specific PROCESS-ACTIVITY with a specific TASK.	Dependent	Army CADM (AOA).
REQUIRED- INTEROPERABILITY- CAPABILITY	REQ_INTERO P_CAPAB	The relationship of a specific INTEROPERABILITY-REQUIREMENT to a specific CAPABILITY. Note: Examples of REQUIRED-INTEROPERABILITY-CAPABILITY for an IER are: Expected Occurrence Rate (inverse seconds), Expected Volume Rate (bits), Maximum Latency Duration Quantity (seconds), Minimum Transfer Rate (bits per second), each of which is expressed as an instance of CAPABILITY for a specific IER.	Dependent	CADM 1.0 (formerly named REQUIRED- CAPABILITY).
SECURITY-ACCESS- COMPARTMENT	SCTY_ACCE SS_CMPRT	(16224/1) (A) THE SPECIFICATION OF AN EXCLUSION DOMAIN FOR INFORMATION RELEASED ON A FORMALLY RESTRICTED BASIS (E.G., TO PROTECT SOURCES OR POTENTIAL USE).	Independent	CADM 2.0.
SECURITY-CLASSIFICATION	SCTY_CLAS S	(940/2) (A) THE LEVEL ASSIGNED TO NATIONAL SECURITY INFORMATION AND MATERIAL THAT DENOTES THE DEGREE OF DAMAGE THAT ITS UNAUTHORIZED DISCLOSURE WOULD CAUSE TO NATIONAL DEFENSE OR FOREIGN RELATIONS OF THE UNITED STATES AND THE DEGREE OF PROTECTION REQUIRED.	Independent	CADM 1.0.
SOFTWARE-ITEM	SW_ITEM	A set of instructions that govern the operation of data processing equipment. Derived from: SOFTWARE--(1853/1) (D) A SET OF INSTRUCTIONS THAT OPERATES DATA PROCESSING EQUIPMENT. (MODIFIED FROM: DATA PRO - STORED SETS OF INSTRUCTIONS THAT GOVERN THE OPERATION OF A COMPUTER SYSTEM AND MAKE THE HARDWARE RUN.) See also SOFTWARE-TYPE--(1862/1) (D). THE CODE THAT REPRESENTS THE CLASS OF SOFTWARE.	Dependent	CADM 1.0.
SOFTWARE-ITEM- ASSOCIATION {ASA} STANDARD	SW_ITEM_AS SOC STD	The association of one instance of SOFTWARE-ITEM with another instance of SOFTWARE-ITEM.	Dependent	Army CADM.
SYSTEM	SYS	(16505/1) (D) AN AGREEMENT FOR A PROCEDURE, PRODUCT OR RELATIONSHIP. Compare [CJCSM 3500.04A, 13 September 1996]: The minimum acceptable proficiency required in the performance of a particular TASK under a specific set of CONDITIONS. Standards are established by a joint force commander. A collection of components organized to accomplish a specific function or set of functions. (IEEE 610.12) [In CADM Draft 1.0, (326) (D) AN ORGANIZED ASSEMBLY OF INTERACTIVE COMPONENTS AND PROCEDURES FORMING A UNIT.]	Independent	CADM 1.0.
SYSTEM-ARCHITECTURE	SYS_ARCH	Descriptions, including graphics, of systems and interconnections providing for or supporting warfighting functions.	Dependent	CADM 1.0.
SYSTEM-ASSOCIATION	SYS_ASSOC	AN ASSOCIATION OF A SYSTEM WITH ANOTHER SYSTEM. Compare: SYSTEM-ASSOCIATION--(12546/1) (D) AN ASSOCIATION BETWEEN A SYSTEM AND ANOTHER SYSTEM INDICATING CONNECTIVITY BETWEEN THE SYSTEMS.	Dependent	CADM 1.0.

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Entity Name	Table Name	Entity Definition	Entity Type	Entity Note
SYSTEM-CAPABILITY	SYS_CAPABILITY	(9081) (D) AN ASSOCIATION BETWEEN A SYSTEM AND A CAPABILITY.	Dependent	CADM 1.0.
SYSTEM-EQUIPMENT-TYPE	SYS_EQUIP_TYPE	The relationship of a specific SYSTEM to a specific EQUIPMENT-TYPE. Compare: SYSTEM-EQUIPMENT--(5980/1) (D) A MAJOR DEFENSE ACQUISITION PROGRAM OR EQUIPMENT.	Dependent	CADM 1.0.
SYSTEM-FUNCTION	SYS_FUNC	A data transform that supports the automation of activities or exchange requirements. Note: "Transform" may refer to either specification or implementation. [In CADM Draft 1.0, The specification of how information objects are synthesized to support the automation of an activity or exchange requirement.]	Dependent	CADM 1.0
SYSTEM-INTERFACE-DESCRIPTION {SV-1}	SYS_IF_DES_CR	A DOCUMENT that depicts the assignments of specific systems and their interfaces to nodes and need lines. Source: C4ISR Architecture Framework, Version 2.0.	Dependent	CADM 2.0
SYSTEM-INTERFACE-DESCRIPTION-ELEMENT	SYS_IF_DES_CR_EL	The designation of the specific SYSTEM-ASSOCIATION-MEANS that apply to a specific SYSTEM-INTERFACE-DESCRIPTION.	Dependent	CADM 2.0
SYSTEM-INTERFACE-TYPE {JCAPS}	SYS_INTF_T_Y	THE RELATIONSHIP BETWEEN A SYSTEM AND AN INTERFACE-TYPE.	Dependent	JCAPS 2.1 (SYSTEM-TYPE-INTERFACE-TYPE).
SYSTEM-ORGANIZATION	SYS_ORG	The association of a specific SYSTEM with a specific ORGANIZATION. See Army COE Data Model (ORG-APPLICATION-USER).	Dependent	CADM 1.0
SYSTEM-SECURITY-CLASSIFICATION	SYS_SEC_CL_ASS	AN ASSOCIATION OF A SYSTEM WITH A SECURITY-CLASSIFICATION.	Dependent	CADM 1.0
SYSTEM-SOFTWARE-ITEM	SYS_SOFTW_ARE_ITEM	The association of a specific SOFTWARE-ITEM to a specific SYSTEM.	Dependent	CADM 1.0.
SYSTEM-SYSTEM-MATRIX {SV-3}	SYS_SYS_M_TRX	The DOCUMENT that describes the way one specific SYSTEM interrelates with another specific SYSTEM.	Dependent	CADM 2.0
SYSTEM-SYSTEM-MATRIX-ELEMENT	SYS_SYS_M_TRX_EL	The specification of a portion of a specific SYSTEM-SYSTEM-MATRIX.	Dependent	CADM 2.0
SYSTEM-TRANSMISSION {JCAPS}	SYS_TRANS_M	THE TRANSMISSION INFORMATION ASSOCIATED WITH A SYSTEM. Source: JCAPS.	Dependent	JCAPS 2.1 (SYSTEM-TYPE-TRANSMISSION-INFO).
SYSTEM-TYPE	SYS_TYPE	(9083) (D) A CATEGORY OF SYSTEM.	Independent	CADM 1.0.
SYSTEM-TYPE-ASSOCIATION {JCAPS}	SYS_TYPE_A_SSOC	The relationship of one SYSTEM-TYPE to another SYSTEM-TYPE. Source: JCAPS.	Dependent	JCAPS 2.1 (from the recursive relationship for SYSTEM-CATEGORY).
TASK	TASK	A discrete unit of work, not specific to a single organization, weapon system, or individual, that enables missions or functions. (UJTL, CJCSM 3500.04A, 1996) [In CADM Draft 1.0, (290) (A) A DIRECTED ACTIVITY. Compare [CJCSM 3500.04A, 13 September 1996]: A discrete event or action, not specific to a single unit, weapon system, or individual, that enables a mission or function to be accomplished.]	Independent	CADM 1.0 (C2 Core).
TASK-ASSOCIATION	TASK ASSO_C	(2672) (A) AN ASSOCIATION BETWEEN A TASK AND ANOTHER TASK.	Dependent	CADM 1.0 (C2 Core)
TASK-MISSION-AREA	TASK_MISSI_ON_AREA	The association of a specific TASK to a specific MISSION-AREA. Compare: MISSION-AREA-MISSION-ESSENTIAL-TASK--(2306/1) (A) AN ASSOCIATION BETWEEN A MISSION-AREA AND A MISSION-ESSENTIAL-TASK.	Dependent	CADM 1.0

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Entity Name	Table Name	Entity Definition	Entity Type	Entity Note
TECHNICAL-ARCHITECTURE	TECH_ARCH	A minimum set of rules governing the arrangement, interaction, and interdependence of the parts or elements whose purpose is to ensure that a conformant system satisfies a specified set of requirements. [C4ISR Architecture Framework, June 1996]	Dependent	CADM 1.0.
USER-DEFINED-PROPERTY {JCAPS}	USER_DEF_PROPS	TBD (JCAPS).	Dependent	JCAPS 2.1 (USER_DEF_PROP S).
USER-DEFINED-PROPERTY- DICTIONARY {JCAPS}	USER_DEF_PROP_DICT	TBD (JCAPS).	Independent	JCAPS 2.1 (USER_DEF_PROP _DICT).
USER-DEFINED-PROPERTY- DICTIONARY-ENUMERATION {JCAPS}	USER_DEF_PROP_ENUM	TBD (JCAPS).	Dependent	JCAPS 2.1 (USER_DEF_PROP _DICT_ENUMS).

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ANNEX L. PROPOSED JCAPS RELATIONSHIP SPECIFICATIONS

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Annex K (Proposed Attribute Specifications)

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Proposed JCAPS View of CADM

Table L-1. Proposed JCAPS View of CADM (314 Relationships)—Relationship Specifications

Parent Entity Name	Relationship Name	Child Entity Name	Cardinality and Null Option	Relationship Type
ACTIVITY-MODEL	is cited by	PROCESS-ACTIVITY-TASK	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
AGREEMENT	references	ARCHITECTURE-AGREEMENT	One-to-Zero-One-or-More	Identifying Subtype
AGREEMENT	cites	STANDARD	Is a	Identifying
ARCHITECTURE	is ordinate for	ARCHITECTURE-AGREEMENT	One-to-Zero-One-or-More	Identifying
ARCHITECTURE	is subordinate to	ARCHITECTURE-ASSOCIATION	One-to-Zero-One-or-More	Identifying
ARCHITECTURE	is recorded in	ARCHITECTURE-DOCUMENT	One-to-Zero-One-or-More	Identifying
ARCHITECTURE	is designed to satisfy	ARCHITECTURE-INTEROPERABILITY-REQUIREMENT	One-to-Zero-One-or-More	Identifying
ARCHITECTURE	is described using	ARCHITECTURE-NODE	One-to-Zero-One-or-More	Identifying
ARCHITECTURE	specifies	ARCHITECTURE-ORGANIZATION	One-to-Zero-One-or-More	Identifying
ARCHITECTURE	supports	ARCHITECTURE-TASK	One-to-Zero-One-or-More	Identifying
ARCHITECTURE	applies to	MATERIEL-ASSOCIATION (ASA, C2 Core)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ARCHITECTURE		OPERATIONAL-ARCHITECTURE	Is a	Subtype
ARCHITECTURE	applies to	ORGANIZATION-ASSOCIATION	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ARCHITECTURE	applies to	ORGANIZATION-TYPE-ASSOCIATION (ASA)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ARCHITECTURE		SYSTEM-ARCHITECTURE	Is a	Subtype
ARCHITECTURE		TECHNICAL-ARCHITECTURE	Is a	Subtype
ARCHITECTURE	is supplemented by	USER-DEFINED-PROPERTY (JCAPS)	One-to-Zero-One-or-More	Identifying
ARMY-ARCHITECTURE-ORGANIZATION	manages	NETWORK	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ARMY-ARCHITECTURE-ORGANIZATION	owns	NETWORK	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ARMY-ARCHITECTURE-ORGANIZATION	has	NODE	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ARMY-DATA-ITEM-TYPE (ASA, C4RDP-IET)	may describe context in	INFO-EXCH-REQ-ELEMENT-PRODUCT (ASA)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ARMY-MATERIEL-ITEM (ASA)	uses	COMMUNICATION-SYSTEM-TRANSMISSION (ASA, C4RDP--CELIN)	One-to-Zero-One-or-More	Identifying
BATTLEFIELD-AUTOMATED-SYSTEM (ASA, C4RDP)	describes receiver's software in	INFO-EXCH-REQ-ELEMENT (ASA)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
BATTLEFIELD-AUTOMATED-SYSTEM (ASA, C4RDP)	describes sender's software in	INFO-EXCH-REQ-ELEMENT (ASA)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
BATTLEFIELD-FUNCTION (ASA, C4RDP)	designates consumer's activity in	INFO-EXCH-REQ-ELEMENT (ASA)	One-to-Zero-One-or-More No Nulls	Non-identifying
BATTLEFIELD-FUNCTION (ASA, C4RDP)	designates producer's activity in	INFO-EXCH-REQ-ELEMENT (ASA)	One-to-Zero-One-or-More No Nulls	Non-identifying
BATTLEFIELD-FUNCTIONAL-AREA-PROONENT (ASA, C4RDP--BFA)	is responsible for	BATTLEFIELD-AUTOMATED-SYSTEM (ASA, C4RDP)	One-to-Zero-One-or-More No Nulls	Non-identifying
CAPABILITY	is used in	MATERIEL-ITEM-CAPABILITY-NORM	One-to-Zero-One-or-More	Identifying

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Parent Entity Name	Relationship Name	Child Entity Name	Cardinality and Null Option	Relationship Type
CAPABILITY	is performed by	NODE-LINK-CAPABILITY	One-to-Zero-One-or-More	Identifying
CAPABILITY	is attained for	REQUIRED-INTEROPERABILITY-CAPABILITY	One-to-Zero-One-or-More	Identifying
CAPABILITY	is performed by	SYSTEM-CAPABILITY	One-to-Zero-One-or-More	Identifying
CAVEATED-SECURITY-CLASSIFICATION	pertains to	ARCHITECTURE	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
CAVEATED-SECURITY-CLASSIFICATION	is the overall classification of	DOCUMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
CAVEATED-SECURITY-CLASSIFICATION	applies to	DOCUMENT-CAVEATED-SECURITY-CLASSIFICATION	One-to-Zero-One-or-More	Identifying
CAVEATED-SECURITY-CLASSIFICATION	pertains to	EXCHANGE-NEED-LINE-REQUIREMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
CAVEATED-SECURITY-CLASSIFICATION	pertains to	INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
CAVEATED-SECURITY-CLASSIFICATION	pertains to	INFORMATION-REQUIREMENT {IER in CADM 2.0}	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
CAVEATED-SECURITY-CLASSIFICATION	pertains to	NETWORK	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
CAVEATED-SECURITY-CLASSIFICATION	pertains to	NODE-LINK	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
CAVEATED-SECURITY-CLASSIFICATION	pertains to	OPERATIONAL-MISSION-THREAD	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
CAVEATED-SECURITY-CLASSIFICATION	pertains to	SYSTEM-ASSOCIATION	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
CAVEATED-SECURITY-CLASSIFICATION	is cited for	SYSTEM-SECURITY-CLASSIFICATION	One-to-Zero-One-or-More	Identifying
COMMUNICATION-CIRCUIT {JCAPS}	rides on	COMMUNICATION-CHANNEL {JCAPS}	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-CIRCUIT {JCAPS}	is used by	COMMUNICATION-CIRCUIT-IER-ASSOCIATION {JCAPS}	One-to-Zero-One-or-More	Identifying
COMMUNICATION-CIRCUIT-TYPE {JCAPS}	is the type for	COMMUNICATION-CIRCUIT {JCAPS}	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-CIRCUIT-TYPE {JCAPS}	supports	INTERFACE-TYPE {JCAPS}	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-LINK	is the child for	COMMUNICATION-CHANNEL {JCAPS}	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-LINK	is the parent for	COMMUNICATION-CHANNEL {JCAPS}	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-LINK	is used by	COMMUNICATION-LINK-IER-ASSOCIATION {JCAPS}	One-to-Zero-One-or-More	Identifying
COMMUNICATION-LINK-TYPE {JCAPS}	is the type for	COMMUNICATION-LINK	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-LINK-TYPE {JCAPS}	supports	INTERFACE-TYPE {JCAPS}	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-MEDIUM	is used to transport	INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-MEDIUM	is cited for	INFORMATION-EXCHANGE-MATRIX-ELEMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying

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Parent Entity Name	Relationship Name	Child Entity Name	Cardinality and Null Option	Relationship Type
COMMUNICATION-MEDIUM	is a mode for	NODE-COMMUNICATION-MEDIUM	One-to-Zero-One-or-More	Identifying
COMMUNICATION-MEDIUM	is a mode for	NODE-LINK-COMMUNICATION-MEDIUM	One-to-Zero-One-or-More	Identifying
COMMUNICATION-PRODUCT (ASA, C4RDP)	may describe format in	INFO-EXCH-REQ-ELEMENT-PRODUCT (ASA)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-SYSTEM	describes transmission capabilities used by	COMMUNICATION-SYSTEM-TRANSMISSION (ASA, C4RDP--CELIN)	One-to-Zero-One-or-More	Identifying
COMMUNICATION-SYSTEM	is used as alternate in	INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-SYSTEM	is used as primary in	INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-SYSTEM	describes	NETWORK	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-SYSTEM	supports	NODE-COMMUNICATION-MEDIUM	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-SYSTEM	supports	NODE-LINK-COMMUNICATION-MEDIUM	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
CONDITION	delimits	REQUIRED-INTEROPERABILITY-CAPABILITY	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COST-BASIS	applies to	MATERIEL-ITEM-COST	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COUNTRY	pertains to	ORGANIZATION-TYPE	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COUNTRY	pertains to	POINT-OF-CONTACT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
DATA-ITEM	is cited for	INFORMATION-EXCHANGE-MATRIX-ELEMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
DATA-ITEM-TYPE	is the type of	DATA-ITEM	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
DATA-ITEM-TYPE	uses	INFORMATION-REQUIREMENT-DATA-ITEM-TYPE	One-to-Zero-One-or-More	Identifying
DATA-ITEM-TYPE	is cited for	NODE-DATA-ITEM-TYPE	One-to-Zero-One-or-More	Identifying
DOCUMENT	records	ARCHITECTURE-DOCUMENT	One-to-Zero-One-or-More	Identifying
DOCUMENT	is ordinate for	DOCUMENT-ASSOCIATION	One-to-Zero-One-or-More	Identifying
DOCUMENT	is subordinate to	DOCUMENT-ASSOCIATION	One-to-Zero-One-or-More	Identifying
DOCUMENT	has an assigned	DOCUMENT-CAVEATED-SECURITY-CLASSIFICATION	One-to-Zero-One-or-More	Identifying
DOCUMENT	specifies	GUIDANCE-DOCUMENT	One-to-Zero-One-or-More	Identifying
DOCUMENT	is the reference for	INFORMATION-ELEMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
DOCUMENT		INFORMATION-EXCHANGE-MATRIX (OV-3, SV-6)	Is a	Subtype
DOCUMENT		INTERFACE-CONTROL-DOCUMENT	Is a	Subtype
DOCUMENT		MISSION-ESSENTIAL-TASK-LIST	Is a	Subtype
DOCUMENT	describes	NODE-ASSOCIATION	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
DOCUMENT		NODE-TREE	Is a	Subtype
DOCUMENT		SYSTEM-INTERFACE-DESCRIPTION (SV-1)	Is a	Subtype
DOCUMENT		SYSTEM-SYSTEM-MATRIX (SV-3)	Is a	Subtype
EQUIPMENT-TYPE	is operated using	EQUIPMENT-TYPE-SOFTWARE-ITEM	One-to-Zero-One-or-More	Identifying

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Parent Entity Name	Relationship Name	Child Entity Name	Cardinality and Null Option	Relationship Type
EQUIPMENT-TYPE	is used in	SYSTEM-EQUIPMENT-TYPE	One-to-Zero-One-or-More	Identifying
EXCHANGE-NEED-LINE-REQUIREMENT	uses	INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
EXCHANGE-NEED-LINE-REQUIREMENT	is referenced in	INFORMATION-EXCHANGE-MATRIX-ELEMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
EXCHANGE-RELATIONSHIP-TYPE {ASA, C4RDP}	describes relationship of	INFO-EXCH-REQ-ELEMENT-PRODUCT {ASA}	One-to-Zero-One-or-More No Nulls	Non-identifying
EXCHANGE-RELATIONSHIP-TYPE {ASA, C4RDP}	describes	ORGANIZATION-TYPE-ASSOCIATION {ASA}	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
FUNCTIONAL-AREA	is supported by	INTEROPERABILITY-REQUIREMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
FUNCTIONAL-AREA	is cited in	MISSION-AREA-FUNCTIONAL-AREA	One-to-Zero-One-or-More	Identifying
FUNCTIONAL-AREA	is supported by	SYSTEM-FUNCTION	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
FUNCTIONAL-OPERATIONAL-FACILITY {ASA, C4RDP}	initiates	INFO-EXCH-REQ-ELEMENT {ASA}	One-to-Zero-One-or-More No Nulls	Non-identifying
FUNCTIONAL-OPERATIONAL-FACILITY {ASA, C4RDP}	receives	INFO-EXCH-REQ-ELEMENT {ASA}	One-to-Zero-One-or-More No Nulls	Non-identifying
FUNCTIONAL-OPERATIONAL-FACILITY {ASA, C4RDP}	transmits	INFO-EXCH-REQ-ELEMENT {ASA}	One-to-Zero-One-or-More No Nulls	Non-identifying
FUNCTIONAL-OPERATIONAL-FACILITY {ASA, C4RDP}	uses	INFO-EXCH-REQ-ELEMENT {ASA}	One-to-Zero-One-or-More No Nulls	Non-identifying
GEOMETRIC-SPATIAL-ELEMENT		POINT	Is a	Subtype
GUIDANCE	is ordinate for	GUIDANCE-ASSOCIATION	One-to-Zero-One-or-More	Identifying
GUIDANCE	is subordinate to	GUIDANCE-ASSOCIATION	One-to-Zero-One-or-More	Identifying
GUIDANCE	may be specified in	GUIDANCE-DOCUMENT	One-to-Zero-One-or-More	Identifying
GUIDANCE		INTEROPERABILITY-REQUIREMENT	Is a	Subtype
IMPLEMENTATION-TIME-FRAME	is cited for	REQUIRED-INTEROPERABILITY-CAPABILITY	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
IMPLEMENTATION-TIME-FRAME	defines applicability time frame for	SYSTEM-CAPABILITY	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	uses	COMMUNICATION-CIRCUIT-IER-ASSOCIATION {JCAPS}	One-to-Zero-One-or-More	Identifying
INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	uses	COMMUNICATION-LINK-IER-ASSOCIATION {JCAPS}	One-to-Zero-One-or-More	Identifying
INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	is restricted by	INFO-EXCH-REQ-ASSURANCE	One-to-Zero-or-One (Z)	Identifying
INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	may have a	INFO-EXCH-REQ-ELEMENT {ASA}	One-to-Zero-or-One (Z)	Identifying
INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	is referenced in	INFORMATION-EXCHANGE-MATRIX-ELEMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	uses	INTERFACE-IER-ASSOCIATION {JCAPS}	One-to-Zero-One-or-More	Identifying
INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	is used in	OPERATIONAL-MISSION-THREAD-ELEMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ-ELEMENT {ASA}	uses	INFO-EXCH-REQ-ELEMENT-METHOD {ASA}	One-to-Exactly-1	Identifying
INFO-EXCH-REQ-ELEMENT {ASA}	sends	INFO-EXCH-REQ-ELEMENT-PRODUCT {ASA}	One-to-Exactly-1	Identifying

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Parent Entity Name	Relationship Name	Child Entity Name	Cardinality and Null Option	Relationship Type
INFORMATION-ELEMENT	is-ordinate-of	INFORMATION-ELEMENT-ASSOCIATION	One-to-Zero-One-or-More	Identifying
INFORMATION-ELEMENT	is-subordinate-of	INFORMATION-ELEMENT-ASSOCIATION	One-to-Zero-One-or-More	Identifying
INFORMATION-ELEMENT	is cited for	INFORMATION-REQUIREMENT (IER in CADM 2.0)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFORMATION-ELEMENT	is contained in	MESSAGE-STANDARD-INFORMATION-ELEMENT	One-to-Zero-One-or-More	Identifying
INFORMATION-EXCHANGE-MATRIX (OV-3; SV-6)	contains	INFORMATION-EXCHANGE-MATRIX-ELEMENT	One-to-Zero-One-or-More	Identifying
INFORMATION-PROCESSING-SYSTEM	may be a	BATTLEFIELD-AUTOMATED-SYSTEM (ASA, C4RDP)	One-to-Zero-or-One (Z)	Identifying
INFORMATION-REQUIREMENT (IER in CADM 2.0)	is used for	INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFORMATION-REQUIREMENT (IER in CADM 2.0)	is referenced in	INFORMATION-EXCHANGE-MATRIX-ELEMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFORMATION-REQUIREMENT (IER in CADM 2.0)	uses	INFORMATION-REQUIREMENT-DATA-ITEM-TYPE	One-to-Zero-One-or-More	Identifying
INTERFACE (JCAPS)	is cited for	INFORMATION-EXCHANGE-MATRIX-ELEMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INTERFACE (JCAPS)	is used by	INTERFACE-IER-ASSOCIATION (JCAPS)	One-to-Zero-One-or-More	Identifying
INTERFACE-TYPE (JCAPS)	is the type for	INTERFACE (JCAPS)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INTERFACE-TYPE (JCAPS)	applies to	SYSTEM-INTERFACE-TYPE (JCAPS)	One-to-Zero-One-or-More	Identifying
INTEROPERABILITY-REQUIREMENT	may be satisfied by	ARCHITECTURE-INTEROPERABILITY-REQUIREMENT	One-to-Zero-One-or-More	Identifying
INTEROPERABILITY-REQUIREMENT		EXCHANGE-NEED-LINE-REQUIREMENT	Is a	Subtype
INTEROPERABILITY-REQUIREMENT		INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)	Is a	Subtype
INTEROPERABILITY-REQUIREMENT		INFORMATION-REQUIREMENT (IER in CADM 2.0)	Is a	Subtype
INTEROPERABILITY-REQUIREMENT	specifies	INTEROPERABILITY-REQUIREMENT-TASK	One-to-Zero-One-or-More	Identifying
INTEROPERABILITY-REQUIREMENT	is supported by	NODE-ASSOCIATION-INTEROPERABILITY-REQUIREMENT	One-to-Zero-One-or-More	Identifying
INTEROPERABILITY-REQUIREMENT	specifies	REQUIRED-INTEROPERABILITY-CAPABILITY	One-to-Zero-One-or-More	Identifying
LINK-ICON-TYPE	depicts	NODE-LINK	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
LOCATION	locates	ORGANIZATION-LOCATION-POINT	One-to-Zero-One-or-More	Identifying
MATERIEL (ASA, C2 Core)	is the object of	MATERIEL-ASSOCIATION (ASA, C2 Core)	One-to-Zero-One-or-More	Identifying
MATERIEL (ASA, C2 Core)	is the subject of	MATERIEL-ASSOCIATION (ASA, C2 Core)	One-to-Zero-One-or-More	Identifying
MATERIEL (ASA, C2 Core)	is represented by	NODE-MATERIEL	One-to-Zero-One-or-More	Identifying
MATERIEL-ITEM	may be a	DATA-ITEM	One-to-Zero-or-One (Z)	Identifying
MATERIEL-ITEM	identifies	EQUIPMENT-TYPE	One-to-Zero-or-One (Z)	Identifying
MATERIEL-ITEM	is used to	INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
MATERIEL-ITEM	communicate	INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
MATERIEL-ITEM	indicates receiver's data equipment in	INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
MATERIEL-ITEM	indicates sender's alternate means of transmission in	INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
MATERIEL-ITEM	indicates sender's data	INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying

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Parent Entity Name	Relationship Name	Child Entity Name	Cardinality and Null Option	Relationship Type
MATERIEL-ITEM	equipment in is the type of	MATERIEL (ASA, C2 Core)	More Nulls Allowed Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
MATERIEL-ITEM	is ordinate for	MATERIEL-ITEM-ASSOCIATION	One-to-Zero-One-or-More	Identifying
MATERIEL-ITEM	is subordinate to	MATERIEL-ITEM-ASSOCIATION	One-to-Zero-One-or-More	Identifying
MATERIEL-ITEM	performs to	MATERIEL-ITEM-CAPABILITY-NORM	One-to-Zero-One-or-More	Identifying
MATERIEL-ITEM	is costed by	MATERIEL-ITEM-COST	One-to-Zero-One-or-More	Identifying
MATERIEL-ITEM	may be a	SOFTWARE-ITEM	One-to-Zero-or-One (Z)	Identifying
MESSAGE-STANDARD	is used in	INFORMATION-EXCHANGE-MATRIX-ELEMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
MESSAGE-STANDARD	contains	MESSAGE-STANDARD-INFORMATION-ELEMENT	One-to-Zero-One-or-More	Identifying
MESSAGE-STANDARD	is cited for	NODE-LINK-COMMUNICATION-MEDIUM	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
MISSION	is cited for	OPERATIONAL-ARCHITECTURE	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
MISSION	is cited for	OPERATIONAL-MISSION-THREAD	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
MISSION-AREA	cites	MISSION-AREA-FUNCTIONAL-AREA	One-to-Zero-One-or-More	Identifying
MISSION-AREA	is cited for	MISSION-AREA-PROCESS-ACTIVITY {JCAPS}	One-to-Zero-One-or-More	Identifying
MISSION-AREA	is cited for	NODE-MISSION-AREA	One-to-Zero-One-or-More	Identifying
MISSION-AREA	is supported by	TASK-MISSION-AREA	One-to-Zero-One-or-More	Identifying
MISSION-ESSENTIAL-TASK	is cited in	MISSION-ESSENTIAL-TASK-LIST-ELEMENT	One-to-Zero-One-or-More No Nulls	Non-identifying
MISSION-ESSENTIAL-TASK-LIST	is defined with	MISSION-ESSENTIAL-TASK-LIST-ELEMENT	One-to-Zero-One-or-More	Identifying
MISSION-ESSENTIAL-TASK-STANDARD	may be cited in	MISSION-ESSENTIAL-TASK-LIST-ELEMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
MISSION-TASK-CONDITION	may be cited in	MISSION-ESSENTIAL-TASK-LIST-ELEMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
MODELING-AND-SIMULATION-JUSTIFICATION {ASA, C4RDP}	may be used to justify	INFO-EXCH-REQ-ELEMENT {ASA}	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NETWORK	indicates transmission group of	INFO-EXCH-REQ-ELEMENT-METHOD {ASA}	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NETWORK	is ordinate for	NETWORK-ASSOCIATION	One-to-Zero-One-or-More	Identifying
NETWORK	is subordinate to	NETWORK-ASSOCIATION	One-to-Zero-One-or-More	Identifying
NETWORK	has as a participant	NETWORK-NODE	One-to-Zero-One-or-More	Identifying
NETWORK	has	NETWORK-ORGANIZATION	One-to-Zero-One-or-More	Identifying
NETWORK	is used in	NODE-ASSOCIATION-NETWORK	One-to-Zero-One-or-More	Identifying
NETWORK-CONTROL-ORGANIZATION-TYPE {ASA, C4RDP--CnetResp}	describes	NETWORK	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NETWORK-ICON	depicts	NETWORK	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NETWORK-TYPE {ASA, C4RDP--CnetTy}	describes	NETWORK	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE	describes	ARCHITECTURE-NODE	One-to-Zero-One-or-More	Identifying
NODE	represents	NETWORK	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE	participates in	NETWORK-NODE	One-to-Zero-One-or-More	Identifying

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Parent Entity Name	Relationship Name	Child Entity Name	Cardinality and Null Option	Relationship Type
NODE	is Node 1 for	NODE-ASSOCIATION	One-to-Zero-One-or-More	Identifying
NODE	is Node 2 for	NODE-ASSOCIATION	One-to-Zero-One-or-More	Identifying
NODE	uses	NODE-COMMUNICATION-MEDIUM	One-to-Zero-One-or-More	Identifying
NODE	carries out functions using	NODE-DATA-ITEM-TYPE	One-to-Zero-One-or-More	Identifying
NODE	represents	NODE-MATERIEL	One-to-Zero-One-or-More	Identifying
NODE	supports activities in	NODE-MISSION-AREA	One-to-Zero-One-or-More	Identifying
NODE	is associated with	NODE-ORGANIZATION	One-to-Zero-One-or-More	Identifying
NODE	is associated with	NODE-ORGANIZATION-TYPE	One-to-Zero-One-or-More	Identifying
NODE	is used to support	NODE-PROCESS-ACTIVITY	One-to-Zero-One-or-More	Identifying
NODE	is supported by	NODE-SYSTEM	One-to-Zero-One-or-More	Identifying
NODE	performs	NODE-TASK	One-to-Zero-One-or-More	Identifying
NODE-ASSOCIATION	is used to represent	INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-ASSOCIATION	supports	NODE-ASSOCIATION-INTEROPERABILITY-REQUIREMENT	One-to-Zero-One-or-More	Identifying
NODE-ASSOCIATION	is used in	NODE-ASSOCIATION-NETWORK	One-to-Zero-One-or-More	Identifying
NODE-ASSOCIATION		NODE-ASSOCIATION	Is a	Subtype
NODE-ASSOCIATION		NODE-HIERARCHY	Is a	Subtype
NODE-ASSOCIATION	defines	NODE-LINK	One-to-Zero-One-or-More	Identifying
NODE-HIERARCHY	depicts	NODE-TREE-NODE-HIERARCHY	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-ICON-TYPE		MATERIEL-ITEM	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-ICON-TYPE	depicts	NODE	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-LINK		COMMUNICATION-LINK	Is a	Subtype
NODE-LINK		INFORMATION-LINK	Is a	Subtype
NODE-LINK	performs	NODE-LINK-CAPABILITY	One-to-Zero-One-or-More	Identifying
NODE-LINK	has	NODE-LINK-COMMUNICATION-MEDIUM	One-to-Zero-One-or-More	Identifying
NODE-SYSTEM	is destination for	COMMUNICATION-CIRCUIT (JCAPS)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-SYSTEM	is the source for	COMMUNICATION-CIRCUIT (JCAPS)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-SYSTEM	is destination for	COMMUNICATION-LINK	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-SYSTEM	is the source for	COMMUNICATION-LINK	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-SYSTEM	is sender for	INTERFACE (JCAPS)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-SYSTEM	is the receiver for	INTERFACE (JCAPS)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-SYSTEM	is owned according to	NODE-SYSTEM-ASSET-OWNERSHIP (JCAPS)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-SYSTEM	is the child for	NODE-SYSTEM-ASSOCIATION (JCAPS)	One-to-Zero-One-or-More	Identifying
NODE-SYSTEM	is the parent for	NODE-SYSTEM-ASSOCIATION (JCAPS)	One-to-Zero-One-or-More	Identifying
NODE-SYSTEM	is funded with	NODE-SYSTEM-COST-MANAGEMENT (JCAPS)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-SYSTEM	employs	NODE-SYSTEM-SOFTWARE-ITEM (JCAPS)	One-to-Zero-One-or-More	Identifying

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Parent Entity Name	Relationship Name	Child Entity Name	Cardinality and Null Option	Relationship Type
NODE-SYSTEM	communicates according to	NODE-SYSTEM-TRANSMISSION (JCAPS)	One-to-Zero-One-or-More	Identifying
NODE-TREE	is defined by	NODE-TREE-NODE-HIERARCHY NETWORK	One-to-Zero-One-or-More	Identifying
OPERATIONAL-FACILITY-ECHELON (ASA, C4RDP--Ech)	describes		Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
OPERATIONAL-FACILITY-PROponent (ASA, C4RDP--Prop)	is responsible for	BATTLEFIELD-AUTOMATED-SYSTEM (ASA, C4RDP)	One-to-Zero-One-or-More No Nulls	Non-identifying
OPERATIONAL-FACILITY-TRANSACTION-DETAIL (ASA, C4RDP--TransDet)	tracks status in	BATTLEFIELD-AUTOMATED-SYSTEM (ASA, C4RDP)	Zero-or-One-to-Zero-or-One (Z) Nulls Allowed	Non-identifying
OPERATIONAL-FACILITY-TRANSACTION-DETAIL (ASA, C4RDP--TransDet)	tracks status in	EXCHANGE-RELATIONSHIP-TYPE (ASA, C4RDP)	Zero-or-One-to-Zero-or-One (Z) Nulls Allowed	Non-identifying
OPERATIONAL-FACILITY-TRANSACTION-DETAIL (ASA, C4RDP--TransDet)	tracks status in	INFO-EXCH-REQ-ELEMENT (ASA)	Zero-or-One-to-Zero-or-One (Z) Nulls Allowed	Non-identifying
OPERATIONAL-MISSION-THREAD	uses	OPERATIONAL-MISSION-THREAD-ELEMENT	One-to-Zero-One-or-More	Identifying
OPERATIONAL-SCENARIO	is specified for	MISSION	One-to-Zero-One-or-More No Nulls	Non-identifying
OPERATIONAL-SCENARIO	applies to	OPERATIONAL-MISSION-THREAD	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ORGANIZATION	coordinates development of	AGREEMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ORGANIZATION	is specified for	ARCHITECTURE-ORGANIZATION	One-to-Zero-One-or-More	Identifying
ORGANIZATION	is destination for	EXCHANGE-NEED-LINE-REQUIREMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ORGANIZATION	is source for	EXCHANGE-NEED-LINE-REQUIREMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ORGANIZATION	resources the destination for	EXCHANGE-NEED-LINE-REQUIREMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ORGANIZATION	resources the source for	EXCHANGE-NEED-LINE-REQUIREMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ORGANIZATION	is-proponent-of	FUNCTIONAL-AREA	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ORGANIZATION	develops	INFORMATION-ELEMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ORGANIZATION	has	NETWORK-ORGANIZATION	One-to-Zero-One-or-More	Identifying
ORGANIZATION	is cited for	NODE-ORGANIZATION	One-to-Zero-One-or-More	Identifying
ORGANIZATION	is ordinate for	ORGANIZATION-ASSOCIATION	One-to-Zero-One-or-More	Identifying
ORGANIZATION	is subordinate for	ORGANIZATION-ASSOCIATION	One-to-Zero-One-or-More	Identifying
ORGANIZATION	occupies/is occupied by	ORGANIZATION-LOCATION-POINT	One-to-Zero-One-or-More	Identifying
ORGANIZATION	has	POINT-OF-CONTACT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ORGANIZATION	is source for	SOFTWARE-ITEM	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ORGANIZATION	has association with	SYSTEM-ORGANIZATION	One-to-Zero-One-or-More	Identifying

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Parent Entity Name	Relationship Name	Child Entity Name	Cardinality and Null Option	Relationship Type
ORGANIZATION-ECHELON-TYPE	defines	ORGANIZATION	One-to-Zero-One-or-More No Nulls	Non-identifying
ORGANIZATION-ICON	depicts	ORGANIZATION-TYPE	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ORGANIZATION-TYPE	is the destination for	EXCHANGE-NEED-LINE-REQUIREMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ORGANIZATION-TYPE	is the source of	EXCHANGE-NEED-LINE-REQUIREMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ORGANIZATION-TYPE	is cited for	NODE-ORGANIZATION-TYPE	One-to-Zero-One-or-More	Identifying
ORGANIZATION-TYPE	is the type of	ORGANIZATION	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ORGANIZATION-TYPE	is ordinate for	ORGANIZATION-TYPE-ASSOCIATION {ASA}	One-to-Zero-One-or-More	Identifying
ORGANIZATION-TYPE	is subordinate to	ORGANIZATION-TYPE-ASSOCIATION {ASA}	One-to-Zero-One-or-More	Identifying
PERIOD	applies to	ARCHITECTURE	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
PERIOD	describes the occurrence of	DOCUMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
PERIOD	is cited for	SYSTEM-SYSTEM-MATRIX-ELEMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
POINT		MEASURED-ELEVATION-POINT	Is a	Subtype
POINT	locates	ORGANIZATION-LOCATION-POINT	One-to-Zero-One-or-More	Identifying
POINT-OF-CONTACT	pertains to	GUIDANCE	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
POINT-OF-CONTACT	is cited for	SYSTEM-ORGANIZATION	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
PROCESS-ACTIVITY	is cited for	ARCHITECTURE	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
PROCESS-ACTIVITY	is referenced as destination for	INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
PROCESS-ACTIVITY	is referenced as source for	INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
PROCESS-ACTIVITY	is cited for	INFORMATION-EXCHANGE-MATRIX-ELEMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
PROCESS-ACTIVITY	applies to	MISSION-AREA-PROCESS-ACTIVITY {JCAPS}	One-to-Zero-One-or-More	Identifying
PROCESS-ACTIVITY	is performed at	NODE-PROCESS-ACTIVITY	One-to-Zero-One-or-More	Identifying
PROCESS-ACTIVITY	is parent for	PROCESS-ACTIVITY-ASSOCIATION {JCAPS}	One-to-Zero-One-or-More	Identifying
PROCESS-ACTIVITY	is the child in	PROCESS-ACTIVITY-ASSOCIATION {JCAPS}	One-to-Zero-One-or-More	Identifying
PROCESS-ACTIVITY	corresponds to	PROCESS-ACTIVITY-TASK	One-to-Zero-One-or-More	Identifying
PROCESS-ACTIVITY		SYSTEM-FUNCTION	Is a	Subtype
SECURITY-ACCESS-COMPARTMENT	applies to	CAVEATED-SECURITY-CLASSIFICATION	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SECURITY-CLASSIFICATION	pertains to	CAVEATED-SECURITY-CLASSIFICATION	One-to-Zero-One-or-More	Identifying
SECURITY-CLASSIFICATION	pertains to existence of	SECURITY-ACCESS-COMPARTMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SOFTWARE-APPLICATION	may be a	SOFTWARE-ITEM	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SOFTWARE-ITEM	is provided for	EQUIPMENT-TYPE-SOFTWARE-ITEM	One-to-Zero-One-or-More	Identifying

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Parent Entity Name	Relationship Name	Child Entity Name	Cardinality and Null Option	Relationship Type
SOFTWARE-ITEM	is employed at	NODE-SYSTEM-SOFTWARE-ITEM (JCAPS)	One-to-Zero-One-or-More	Identifying
SOFTWARE-ITEM	is ordinate for	SOFTWARE-ITEM-ASSOCIATION (ASA)	One-to-Zero-One-or-More	Identifying
SOFTWARE-ITEM	is subordinate to	SOFTWARE-ITEM-ASSOCIATION (ASA)	One-to-Zero-One-or-More	Identifying
SOFTWARE-ITEM	is used in	SYSTEM-SOFTWARE-ITEM	One-to-Zero-One-or-More	Identifying
STANDARD		MESSAGE-STANDARD	Is a	Subtype
STANDARD	defines services for	NODE-COMMUNICATION-MEDIUM	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SYSTEM	is the destination for	COMMUNICATION-CIRCUIT-TYPE (JCAPS)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SYSTEM	is the source for	COMMUNICATION-CIRCUIT-TYPE (JCAPS)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SYSTEM	is destination for	COMMUNICATION-LINK-TYPE (JCAPS)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SYSTEM	is source for	COMMUNICATION-LINK-TYPE (JCAPS)	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SYSTEM		COMMUNICATION-SYSTEM	Is a	Subtype
SYSTEM	provides	INFORMATION-EXCHANGE-MATRIX-ELEMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SYSTEM	receives	INFORMATION-EXCHANGE-MATRIX-ELEMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SYSTEM	supports the functions of	NODE-SYSTEM	One-to-Zero-One-or-More	Identifying
SYSTEM	is ordinate for	SYSTEM-ASSOCIATION	One-to-Zero-One-or-More	Identifying
SYSTEM	is subordinate to	SYSTEM-ASSOCIATION	One-to-Zero-One-or-More	Identifying
SYSTEM	performs to	SYSTEM-CAPABILITY	One-to-Zero-One-or-More	Identifying
SYSTEM	uses	SYSTEM-EQUIPMENT-TYPE	One-to-Zero-One-or-More	Identifying
SYSTEM	has	SYSTEM-INTERFACE-TYPE (JCAPS)	One-to-Zero-One-or-More	Identifying
SYSTEM	is associated to	SYSTEM-ORGANIZATION	One-to-Zero-One-or-More	Identifying
SYSTEM	is designed to satisfy	SYSTEM-SECURITY-CLASSIFICATION	One-to-Zero-One-or-More	Identifying
SYSTEM	uses	SYSTEM-SOFTWARE-ITEM	One-to-Zero-One-or-More	Identifying
SYSTEM	communications according to	SYSTEM-TRANSMISSION (JCAPS)	One-to-Zero-One-or-More	Identifying
SYSTEM-ASSOCIATION-MEANS	defines	SYSTEM-INTERFACE-DESCRIPTION-ELEMENT	One-to-Zero-One-or-More No Nulls	Non-identifying
SYSTEM-ASSOCIATION-MEANS	is cited in	SYSTEM-SYSTEM-MATRIX-ELEMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SYSTEM-INTERFACE-DESCRIPTION (SV-1)	is defined by	SYSTEM-INTERFACE-DESCRIPTION-ELEMENT	One-to-Zero-One-or-More	Identifying
SYSTEM-PROCESS-ACTIVITY	provides	SYSTEM-CAPABILITY	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SYSTEM-SOFTWARE-ITEM	provides	INFORMATION-EXCHANGE-MATRIX-ELEMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SYSTEM-SOFTWARE-ITEM	receives	INFORMATION-EXCHANGE-MATRIX-ELEMENT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SYSTEM-SYSTEM-MATRIX (SV-3)	is specified using	SYSTEM-SYSTEM-MATRIX-ELEMENT	One-to-Zero-One-or-More	Identifying
SYSTEM-TYPE	is the type of	SYSTEM	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying

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Parent Entity Name	Relationship Name	Child Entity Name	Cardinality and Null Option	Relationship Type
SYSTEM-TYPE	is child in	SYSTEM-TYPE-ASSOCIATION {JCAPS}	One-to-Zero-One-or-More	Identifying
SYSTEM-TYPE	is parent in	SYSTEM-TYPE-ASSOCIATION {JCAPS}	One-to-Zero-One-or-More	Identifying
TASK	is supported by	ARCHITECTURE-TASK	One-to-Zero-One-or-More	Identifying
TASK	is destination need for	INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
TASK	is source of need for	INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
TASK	supports	INTEROPERABILITY-REQUIREMENT-TASK	One-to-Zero-One-or-More	Identifying
TASK		MISSION-ESSENTIAL-TASK	Is a	Subtype
TASK	is performed by	NODE-TASK	One-to-Zero-One-or-More	Identifying
TASK	corresponds to	PROCESS-ACTIVITY-TASK	One-to-Zero-One-or-More	Identifying
TASK	is ordinate for	TASK-ASSOCIATION	One-to-Zero-One-or-More	Identifying
TASK	is subordinate to	TASK-ASSOCIATION	One-to-Zero-One-or-More	Identifying
TASK	supports	TASK-MISSION-AREA	One-to-Zero-One-or-More	Identifying
TRANSMISSION-MEANS-TYPE {ASA, C4RDP--CChar}	designates category of transmission in	INFO-EXCH-REQ-ELEMENT-METHOD {ASA}	One-to-Zero-One-or-More No Nulls	Non-identifying
UNIFORMED-SERVICE-RANK	is held by	POINT-OF-CONTACT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
UNITED-STATES-STATE	applies to	POINT-OF-CONTACT	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
USER-DEFINED-PROPERTY-DICTIONARY {JCAPS}	has	USER-DEFINED-PROPERTY {JCAPS}	One-to-Zero-One-or-More	Identifying
USER-DEFINED-PROPERTY-DICTIONARY {JCAPS}	has	USER-DEFINED-PROPERTY-DICTIONARY-ENUMERATION {JCAPS}	One-to-Zero-One-or-More	Identifying

Table L-2. Proposed JCAPS View of CADM (143 Entities)—Relationship Specifications (Sorted by Child Entity)

Child Entity Name	Parent Entity Name	Relationship Name	Cardinality and Null Option	Relationship Type
AGREEMENT	ORGANIZATION	coordinates development of	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ARCHITECTURE	CAVEATED-SECURITY-CLASSIFICATION	pertains to	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ARCHITECTURE	PERIOD	applies to	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ARCHITECTURE	PROCESS-ACTIVITY	is cited for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ARCHITECTURE-AGREEMENT	AGREEMENT	references	One-to-Zero-One-or-More	Identifying
ARCHITECTURE-AGREEMENT	ARCHITECTURE	cites	One-to-Zero-One-or-More	Identifying
ARCHITECTURE-ASSOCIATION	ARCHITECTURE	is ordinate for	One-to-Zero-One-or-More	Identifying
ARCHITECTURE-ASSOCIATION	ARCHITECTURE	is subordinate to	One-to-Zero-One-or-More	Identifying
ARCHITECTURE-DOCUMENT	ARCHITECTURE	is recorded in	One-to-Zero-One-or-More	Identifying
ARCHITECTURE-DOCUMENT	DOCUMENT	records	One-to-Zero-One-or-More	Identifying
ARCHITECTURE-INTEROPERABILITY-REQUIREMENT	ARCHITECTURE	is designed to satisfy	One-to-Zero-One-or-More	Identifying
ARCHITECTURE-INTEROPERABILITY-REQUIREMENT	INTEROPERABILITY-REQUIREMENT	may be satisfied by	One-to-Zero-One-or-More	Identifying
ARCHITECTURE-NODE	ARCHITECTURE	is described using	One-to-Zero-One-or-More	Identifying
ARCHITECTURE-NODE	NODE	describes	One-to-Zero-One-or-More	Identifying
ARCHITECTURE-ORGANIZATION	ARCHITECTURE	specifies	One-to-Zero-One-or-More	Identifying
ARCHITECTURE-ORGANIZATION	ORGANIZATION	is specified for	One-to-Zero-One-or-More	Identifying
ARCHITECTURE-TASK	ARCHITECTURE	supports	One-to-Zero-One-or-More	Identifying
ARCHITECTURE-TASK	TASK	is supported by	One-to-Zero-One-or-More	Identifying
BATTLEFIELD-AUTOMATED-SYSTEM {ASA, C4RDP}	BATTLEFIELD-FUNCTIONAL-AREA-PROONENT {ASA, C4RDP--BFA}	is responsible for	One-to-Zero-One-or-More No Nulls	Non-identifying
BATTLEFIELD-AUTOMATED-SYSTEM {ASA, C4RDP}	INFORMATION-PROCESSING-SYSTEM	may be a	One-to-Zero-or-One (Z)	Identifying
BATTLEFIELD-AUTOMATED-SYSTEM {ASA, C4RDP}	OPERATIONAL-FACILITY-PROONENT {ASA, C4RDP--Prop}	is responsible for	One-to-Zero-One-or-More No Nulls	Non-identifying
BATTLEFIELD-AUTOMATED-SYSTEM {ASA, C4RDP}	OPERATIONAL-FACILITY-TRANSACTION-DETAIL {ASA, C4RDP--TransDet}	tracks status in	Zero-or-One-to-Zero-or-One (Z) Nulls Allowed	Non-identifying
CAVEATED-SECURITY-CLASSIFICATION	SECURITY-ACCESS-COMPARTMENT	applies to	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
CAVEATED-SECURITY-CLASSIFICATION	SECURITY-CLASSIFICATION	pertains to	One-to-Zero-One-or-More	Identifying
COMMUNICATION-CHANNEL {JCAPS}	COMMUNICATION-CIRCUIT {JCAPS}	rides on	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-CHANNEL {JCAPS}	COMMUNICATION-LINK	is the child for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-CHANNEL {JCAPS}	COMMUNICATION-LINK	is the parent for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-CIRCUIT {JCAPS}	COMMUNICATION-CIRCUIT-TYPE {JCAPS}	is the type for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-CIRCUIT {JCAPS}	NODE-SYSTEM	is destination for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying

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Child Entity Name	Parent Entity Name	Relationship Name	Cardinality and Null Option	Relationship Type
COMMUNICATION-CIRCUIT {JCAPS}	NODE-SYSTEM	is the source for	More Nulls Allowed	Non-identifying
COMMUNICATION-CIRCUIT-IER-ASSOCIATION {JCAPS}	COMMUNICATION-CIRCUIT {JCAPS}	is used by	One-to-Zero-One-or-More	Identifying
COMMUNICATION-CIRCUIT-IER-ASSOCIATION {JCAPS}	INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0} SYSTEM	uses	One-to-Zero-One-or-More	Identifying
COMMUNICATION-CIRCUIT-TYPE {JCAPS}	SYSTEM	is the destination for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-CIRCUIT-TYPE {JCAPS}	SYSTEM	is the source for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-LINK	COMMUNICATION-LINK-TYPE {JCAPS}	is the type for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-LINK	NODE-LINK	is a	Is a	Subtype
COMMUNICATION-LINK	NODE-SYSTEM	is destination for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-LINK	NODE-SYSTEM	is the source for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-LINK-IER-ASSOCIATION {JCAPS}	COMMUNICATION-LINK	is used by	One-to-Zero-One-or-More	Identifying
COMMUNICATION-LINK-IER-ASSOCIATION {JCAPS}	INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0} SYSTEM	uses	One-to-Zero-One-or-More	Identifying
COMMUNICATION-LINK-TYPE {JCAPS}	SYSTEM	is destination for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-LINK-TYPE {JCAPS}	SYSTEM	is source for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
COMMUNICATION-SYSTEM	SYSTEM	is a	Is a	Subtype
COMMUNICATION-SYSTEM-TRANSMISSION {ASA, C4RDP--CELIN}	ARMY-MATERIEL-ITEM {ASA}	uses	One-to-Zero-One-or-More	Identifying
COMMUNICATION-SYSTEM-TRANSMISSION {ASA, C4RDP--CELIN}	COMMUNICATION-SYSTEM	describes transmission capabilities used by	One-to-Zero-One-or-More	Identifying
DATA-ITEM	DATA-ITEM-TYPE	is the type of	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
DATA-ITEM	MATERIEL-ITEM	may be a	One-to-Zero-or-One (Z)	Identifying
DOCUMENT	CAVEATED-SECURITY-CLASSIFICATION	is the overall classification of	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
DOCUMENT	PERIOD	describes the occurrence of	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
DOCUMENT-ASSOCIATION	DOCUMENT	is ordinate for	One-to-Zero-One-or-More	Identifying
DOCUMENT-ASSOCIATION	DOCUMENT	is subordinate to	One-to-Zero-One-or-More	Identifying
DOCUMENT-CAVEATED-SECURITY-CLASSIFICATION	CAVEATED-SECURITY-CLASSIFICATION	applies to	One-to-Zero-One-or-More	Identifying
DOCUMENT-CAVEATED-SECURITY-CLASSIFICATION	DOCUMENT	has an assigned	One-to-Zero-One-or-More	Identifying
EQUIPMENT-TYPE	MATERIEL-ITEM	identifies	One-to-Zero-or-One (Z)	Identifying
EQUIPMENT-TYPE-SOFTWARE-ITEM	EQUIPMENT-TYPE	is operated using	One-to-Zero-One-or-More	Identifying
EQUIPMENT-TYPE-SOFTWARE-ITEM	SOFTWARE-ITEM	is provided for	One-to-Zero-One-or-More	Identifying

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Child Entity Name	Parent Entity Name	Relationship Name	Cardinality and Null Option	Relationship Type
EXCHANGE-NEED-LINE-REQUIREMENT	CAVEATED-SECURITY-CLASSIFICATION	pertains to	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
EXCHANGE-NEED-LINE-REQUIREMENT	INTEROPERABILITY-REQUIREMENT	is destination for	Is a	Subtype
EXCHANGE-NEED-LINE-REQUIREMENT	ORGANIZATION	is source for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
EXCHANGE-NEED-LINE-REQUIREMENT	ORGANIZATION	resources the destination for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
EXCHANGE-NEED-LINE-REQUIREMENT	ORGANIZATION	resources the source for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
EXCHANGE-NEED-LINE-REQUIREMENT	ORGANIZATION-TYPE	is the destination for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
EXCHANGE-NEED-LINE-REQUIREMENT	ORGANIZATION-TYPE	is the source of	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
EXCHANGE-RELATIONSHIP-TYPE (ASA, C4RDP)	OPERATIONAL-FACILITY-TRANSACTION-DETAIL (ASA, C4RDP--TransDet)	tracks status in	Zero-or-One-to-Zero-or-One (Z) Nulls Allowed	Non-identifying
FUNCTIONAL-AREA	ORGANIZATION	is-proponent-of	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
GUIDANCE	POINT-OF-CONTACT	pertains to	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
GUIDANCE-ASSOCIATION	GUIDANCE	is ordinate for	One-to-Zero-One-or-More	Identifying
GUIDANCE-ASSOCIATION	GUIDANCE	is subordinate to	One-to-Zero-One-or-More	Identifying
GUIDANCE-DOCUMENT	DOCUMENT	specifies	One-to-Zero-One-or-More	Identifying
GUIDANCE-DOCUMENT	GUIDANCE	may be specified in	One-to-Zero-One-or-More	Identifying
INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)	CAVEATED-SECURITY-CLASSIFICATION	pertains to	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)	COMMUNICATION-MEDIUM	is used to transport	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)	EXCHANGE-NEED-LINE-REQUIREMENT	uses	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)	INFORMATION-REQUIREMENT (IER in CADM 2.0)	is used for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)	INTEROPERABILITY-REQUIREMENT		Is a	Subtype
INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)	MATERIEL-ITEM	is used to communicate	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)	NODE-ASSOCIATION	is used to represent	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)	PROCESS-ACTIVITY	is referenced as destination for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)	PROCESS-ACTIVITY	is referenced as source for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)	TASK	is destination need for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)	TASK	is source of need for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying

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Child Entity Name	Parent Entity Name	Relationship Name	Cardinality and Null Option	Relationship Type
INFO-EXCH-REQ-ASSURANCE	INFO-EXCH-REQ (EXCH-NEED-LINE-IER in C4DM 2.0)	is restricted by	One-to-Zero-or-One (Z)	Identifying
INFO-EXCH-REQ-ELEMENT (ASA)	BATTLEFIELD-AUTOMATED-SYSTEM (ASA, C4RDP)	describes receiver's software in	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ-ELEMENT (ASA)	BATTLEFIELD-AUTOMATED-SYSTEM (ASA, C4RDP)	describes sender's software in	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ-ELEMENT (ASA)	BATTLEFIELD-FUNCTION (ASA, C4RDP)	designates consumer's activity in	One-to-Zero-One-or-More No Nulls	Non-identifying
INFO-EXCH-REQ-ELEMENT (ASA)	BATTLEFIELD-FUNCTION (ASA, C4RDP)	designates producer's activity in	One-to-Zero-One-or-More No Nulls	Non-identifying
INFO-EXCH-REQ-ELEMENT (ASA)	FUNCTIONAL-OPERATIONAL-FACILITY (ASA, C4RDP)	initiates	One-to-Zero-One-or-More No Nulls	Non-identifying
INFO-EXCH-REQ-ELEMENT (ASA)	FUNCTIONAL-OPERATIONAL-FACILITY (ASA, C4RDP)	receives	One-to-Zero-One-or-More No Nulls	Non-identifying
INFO-EXCH-REQ-ELEMENT (ASA)	FUNCTIONAL-OPERATIONAL-FACILITY (ASA, C4RDP)	transmits	One-to-Zero-One-or-More No Nulls	Non-identifying
INFO-EXCH-REQ-ELEMENT (ASA)	FUNCTIONAL-OPERATIONAL-FACILITY (ASA, C4RDP)	uses	One-to-Zero-One-or-More No Nulls	Non-identifying
INFO-EXCH-REQ-ELEMENT (ASA)	INFO-EXCH-REQ (EXCH-NEED-LINE-IER in C4DM 2.0)	may have a	One-to-Zero-or-One (Z)	Identifying
INFO-EXCH-REQ-ELEMENT (ASA)	MODELING-AND-SIMULATION-JUSTIFICATION (ASA, C4RDP)	may be used to justify	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ-ELEMENT (ASA)	OPERATIONAL-FACILITY-TRANSACTION-DETAIL (ASA, C4RDP--TransDet)	tracks status in	Zero-or-One-to-Zero-or-One (Z) Nulls Allowed	Non-identifying
INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	COMMUNICATION-SYSTEM	is used as alternate in	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	COMMUNICATION-SYSTEM	is used as primary in	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	INFO-EXCH-REQ-ELEMENT (ASA)	uses	One-to-Exactly-1	Identifying
INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	MATERIEL-ITEM	indicates receiver's data equipment in	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	MATERIEL-ITEM	indicates sender's alternate means of transmission in	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	MATERIEL-ITEM	indicates sender's data equipment in	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	NETWORK	indicates transmission group of	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	TRANSMISSION-MEANS-TYPE (ASA, C4RDP--CChar)	designates category of transmission in	One-to-Zero-One-or-More No Nulls	Non-identifying
INFO-EXCH-REQ-ELEMENT-PRODUCT (ASA)	ARMY-DATA-ITEM-TYPE (ASA, C4RDP--IET)	may describe context in	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ-ELEMENT-PRODUCT (ASA)	COMMUNICATION-PRODUCT (ASA, C4RDP)	may describe format in	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFO-EXCH-REQ-ELEMENT-PRODUCT (ASA)	EXCHANGE-RELATIONSHIP-TYPE (ASA, C4RDP)	describes relationship of	One-to-Zero-One-or-More No Nulls	Non-identifying

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Child Entity Name	Parent Entity Name	Relationship Name	Cardinality and Null Option	Relationship Type
INFO-EXCH-REQ-ELEMENT-PRODUCT (ASA)	INFO-EXCH-REQ-ELEMENT (ASA)	sends	One-to-Exactly-1	Identifying
INFORMATION-ELEMENT	DOCUMENT	is the reference for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFORMATION-ELEMENT	ORGANIZATION	develops	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFORMATION-ELEMENT-ASSOCIATION	INFORMATION-ELEMENT	is ordinate-of	One-to-Zero-One-or-More	Identifying
INFORMATION-ELEMENT-ASSOCIATION	INFORMATION-ELEMENT	is subordinate-of	One-to-Zero-One-or-More	Identifying
INFORMATION-EXCHANGE-MATRIX (OV-3; SV-6)	DOCUMENT		Is a	Subtype
INFORMATION-EXCHANGE-MATRIX-ELEMENT	COMMUNICATION-MEDIUM	is cited for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFORMATION-EXCHANGE-MATRIX-ELEMENT	DATA-ITEM	is cited for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFORMATION-EXCHANGE-MATRIX-ELEMENT	EXCHANGE-NEED-LINE-REQUIREMENT	is referenced in	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFORMATION-EXCHANGE-MATRIX-ELEMENT	INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)	is referenced in	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFORMATION-EXCHANGE-MATRIX-ELEMENT	INFORMATION-EXCHANGE-MATRIX (OV-3; SV-6)	contains	One-to-Zero-One-or-More	Identifying
INFORMATION-EXCHANGE-MATRIX-ELEMENT	INFORMATION-REQUIREMENT (IER in CADM 2.0)	is referenced in	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFORMATION-EXCHANGE-MATRIX-ELEMENT	INTERFACE (JCAPS)	is cited for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFORMATION-EXCHANGE-MATRIX-ELEMENT	MESSAGE-STANDARD	is used in	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFORMATION-EXCHANGE-MATRIX-ELEMENT	PROCESS-ACTIVITY	is cited for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFORMATION-EXCHANGE-MATRIX-ELEMENT	SYSTEM	provides	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFORMATION-EXCHANGE-MATRIX-ELEMENT	SYSTEM	receives	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFORMATION-EXCHANGE-MATRIX-ELEMENT	SYSTEM-SOFTWARE-ITEM	provides	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFORMATION-EXCHANGE-MATRIX-ELEMENT	SYSTEM-SOFTWARE-ITEM	receives	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFORMATION-LINK	NODE-LINK		Is a	Subtype
INFORMATION-REQUIREMENT (IER in CADM 2.0)	CAVEATED-SECURITY-CLASSIFICATION	pertains to	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFORMATION-REQUIREMENT (IER in CADM 2.0)	INFORMATION-ELEMENT	is cited for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INFORMATION-REQUIREMENT (IER in CADM 2.0)	INTEROPERABILITY-REQUIREMENT		Is a	Subtype
INFORMATION-REQUIREMENT-DATA-ITEM-TYPE	DATA-ITEM-TYPE	uses	One-to-Zero-One-or-More	Identifying
INFORMATION-REQUIREMENT-DATA-ITEM-TYPE	INFORMATION-REQUIREMENT (IER in CADM 2.0)	uses	One-to-Zero-One-or-More	Identifying

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Child Entity Name	Parent Entity Name	Relationship Name	Cardinality and Null Option	Relationship Type
INTERFACE (JCAPS)	INTERFACE-TYPE (JCAPS)	is the type for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INTERFACE (JCAPS)	NODE-SYSTEM	is sender for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INTERFACE (JCAPS)	NODE-SYSTEM	is the receiver for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INTERFACE-CONTROL-DOCUMENT	DOCUMENT	uses	Is a	Subtype
INTERFACE-IER-ASSOCIATION (JCAPS)	INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)		One-to-Zero-One-or-More	Identifying
INTERFACE-IER-ASSOCIATION (JCAPS)	INTERFACE (JCAPS)	is used by	One-to-Zero-One-or-More	Identifying
INTERFACE-TYPE (JCAPS)	COMMUNICATION-CIRCUIT-TYPE (JCAPS)	supports	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INTERFACE-TYPE (JCAPS)	COMMUNICATION-LINK-TYPE (JCAPS)	supports	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INTEROPERABILITY-REQUIREMENT	FUNCTIONAL-AREA	is supported by	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
INTEROPERABILITY-REQUIREMENT	GUIDANCE		Is a	Subtype
INTEROPERABILITY-REQUIREMENT-TASK	INTEROPERABILITY-REQUIREMENT	specifies	One-to-Zero-One-or-More	Identifying
INTEROPERABILITY-REQUIREMENT-TASK	TASK	supports	One-to-Zero-One-or-More	Identifying
MATERIEL (ASA, C2 Core)	MATERIEL-ITEM	is the type of	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
MATERIEL-ASSOCIATION (ASA, C2 Core)	ARCHITECTURE	applies to	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
MATERIEL-ASSOCIATION (ASA, C2 Core)	MATERIEL (ASA, C2 Core)	is the object of	One-to-Zero-One-or-More	Identifying
MATERIEL-ASSOCIATION (ASA, C2 Core)	MATERIEL (ASA, C2 Core)	is the subject of	One-to-Zero-One-or-More	Identifying
MATERIEL-ITEM	NODE-ICON-TYPE	depicts	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
MATERIEL-ITEM-ASSOCIATION	MATERIEL-ITEM	is ordinate for	One-to-Zero-One-or-More	Identifying
MATERIEL-ITEM-ASSOCIATION	MATERIEL-ITEM	is subordinate to	One-to-Zero-One-or-More	Identifying
MATERIEL-ITEM-CAPABILITY-NORM	CAPABILITY	is used in	One-to-Zero-One-or-More	Identifying
MATERIEL-ITEM-CAPABILITY-NORM	MATERIEL-ITEM	performs to	One-to-Zero-One-or-More	Identifying
MATERIEL-ITEM-COST	COST-BASIS	applies to	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
MATERIEL-ITEM-COST	MATERIEL-ITEM	is costed by	One-to-Zero-One-or-More	Identifying
MEASURED-ELEVATION-POINT	POINT		Is a	Subtype
MESSAGE-STANDARD	STANDARD		Is a	Subtype
MESSAGE-STANDARD-INFORMATION-ELEMENT	INFORMATION-ELEMENT	is contained in	One-to-Zero-One-or-More	Identifying
MESSAGE-STANDARD-INFORMATION-ELEMENT	MESSAGE-STANDARD	contains	One-to-Zero-One-or-More	Identifying
MISSION	OPERATIONAL-SCENARIO	is specified for	One-to-Zero-One-or-More No Nulls	Non-identifying
MISSION-AREA-FUNCTIONAL-AREA	FUNCTIONAL-AREA	is cited in	One-to-Zero-One-or-More	Identifying
MISSION-AREA-FUNCTIONAL-AREA	MISSION-AREA	cites	One-to-Zero-One-or-More	Identifying
MISSION-AREA-PROCESS-ACTIVITY	MISSION-AREA	is cited for	One-to-Zero-One-or-More	Identifying

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Child Entity Name	Parent Entity Name	Relationship Name	Cardinality and Null Option	Relationship Type
{JCAPS} MISSION-AREA-PROCESS-ACTIVITY	PROCESS-ACTIVITY	applies to	One-to-Zero-One-or-More	Identifying
{JCAPS} MISSION-ESSENTIAL-TASK	TASK		Is a	Subtype
MISSION-ESSENTIAL-TASK-LIST	DOCUMENT		Is a	Subtype
MISSION-ESSENTIAL-TASK-LIST-ELEMENT	MISSION-ESSENTIAL-TASK	is cited in	One-to-Zero-One-or-More No Nulls	Non-identifying
MISSION-ESSENTIAL-TASK-LIST-ELEMENT	MISSION-ESSENTIAL-TASK-LIST	is defined with	One-to-Zero-One-or-More	Identifying
MISSION-ESSENTIAL-TASK-LIST-ELEMENT	MISSION-ESSENTIAL-TASK-STANDARD	may be cited in	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
MISSION-ESSENTIAL-TASK-LIST-ELEMENT	MISSION-TASK-CONDITION	may be cited in	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NETWORK	ARMY-ARCHITECTURE-ORGANIZATION	manages	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NETWORK	ARMY-ARCHITECTURE-ORGANIZATION	owns	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NETWORK	CAVEATED-SECURITY-CLASSIFICATION	pertains to	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NETWORK	COMMUNICATION-SYSTEM	describes	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NETWORK	NETWORK-CONTROL-ORGANIZATION-TYPE (ASA, C4RDP--CnetResp)	describes	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NETWORK	NETWORK-ICON	depicts	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NETWORK	NETWORK-TYPE (ASA, C4RDP--CnetTy)	describes	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NETWORK	NODE	represents	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NETWORK	OPERATIONAL-FACILITY-ECHOLON (ASA, C4RDP--Ech)	describes	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NETWORK-ASSOCIATION	NETWORK	is ordinate for	One-to-Zero-One-or-More	Identifying
NETWORK-ASSOCIATION	NETWORK	is subordinate to	One-to-Zero-One-or-More	Identifying
NETWORK-NODE	NETWORK	has as a participant	One-to-Zero-One-or-More	Identifying
NETWORK-NODE	NODE	participates in	One-to-Zero-One-or-More	Identifying
NETWORK-ORGANIZATION	NETWORK	has	One-to-Zero-One-or-More	Identifying
NETWORK-ORGANIZATION	ORGANIZATION	has	One-to-Zero-One-or-More	Identifying
NODE	ARMY-ARCHITECTURE-ORGANIZATION	has	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE	NODE-ICON-TYPE	depicts	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-ASSOCIATION	DOCUMENT	describes	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-ASSOCIATION	NODE	is Node 1 for	One-to-Zero-One-or-More	Identifying
NODE-ASSOCIATION	NODE	is Node 2 for	One-to-Zero-One-or-More	Identifying
NODE-ASSOCIATION-INTEROPERABILITY-REQUIREMENT	INTEROPERABILITY-REQUIREMENT	is supported by	One-to-Zero-One-or-More	Identifying

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Child Entity Name	Parent Entity Name	Relationship Name	Cardinality and Null Option	Relationship Type
NODE-ASSOCIATION-INTEROPERABILITY-REQUIREMENT	NODE-ASSOCIATION	supports	One-to-Zero-One-or-More	Identifying
NODE-ASSOCIATION-NETWORK	NETWORK	is used in	One-to-Zero-One-or-More	Identifying
NODE-ASSOCIATION-NETWORK	NODE-ASSOCIATION	is used in	One-to-Zero-One-or-More	Identifying
NODE-COMMUNICATION-MEDIUM	COMMUNICATION-MEDIUM	is a mode for	One-to-Zero-One-or-More	Identifying
NODE-COMMUNICATION-MEDIUM	COMMUNICATION-SYSTEM	supports	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-COMMUNICATION-MEDIUM	NODE	uses	One-to-Zero-One-or-More	Identifying
NODE-COMMUNICATION-MEDIUM	STANDARD	defines services for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-DATA-ITEM-TYPE	DATA-ITEM-TYPE	is cited for	One-to-Zero-One-or-More	Identifying
NODE-DATA-ITEM-TYPE	NODE	carries out functions using	One-to-Zero-One-or-More	Identifying
NODE-HIERARCHY	NODE-ASSOCIATION		Is a	Subtype
NODE-LINK	CAVEATED-SECURITY-CLASSIFICATION	pertains to	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-LINK	LINK-ICON-TYPE	depicts	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-LINK	NODE-ASSOCIATION		Is a	Subtype
NODE-LINK-CAPABILITY	CAPABILITY	is performed by	One-to-Zero-One-or-More	Identifying
NODE-LINK-CAPABILITY	NODE-LINK	performs	One-to-Zero-One-or-More	Identifying
NODE-LINK-COMMUNICATION-MEDIUM	COMMUNICATION-MEDIUM	is a mode for	One-to-Zero-One-or-More	Identifying
NODE-LINK-COMMUNICATION-MEDIUM	COMMUNICATION-SYSTEM	supports	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-LINK-COMMUNICATION-MEDIUM	MESSAGE-STANDARD	is cited for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-LINK-COMMUNICATION-MEDIUM	NODE-LINK	has	One-to-Zero-One-or-More	Identifying
NODE-MATERIEL	MATERIEL (ASA, C2 Core)	is represented by	One-to-Zero-One-or-More	Identifying
NODE-MATERIEL	NODE	represents	One-to-Zero-One-or-More	Identifying
NODE-MISSION-AREA	MISSION-AREA	is cited for	One-to-Zero-One-or-More	Identifying
NODE-MISSION-AREA	NODE	supports activities in	One-to-Zero-One-or-More	Identifying
NODE-ORGANIZATION	ORGANIZATION	is associated with	One-to-Zero-One-or-More	Identifying
NODE-ORGANIZATION	NODE	is cited for	One-to-Zero-One-or-More	Identifying
NODE-ORGANIZATION-TYPE	NODE	is associated with	One-to-Zero-One-or-More	Identifying
NODE-ORGANIZATION-TYPE	ORGANIZATION-TYPE	is cited for	One-to-Zero-One-or-More	Identifying
NODE-PROCESS-ACTIVITY	NODE	is used to support	One-to-Zero-One-or-More	Identifying
NODE-PROCESS-ACTIVITY	PROCESS-ACTIVITY	is performed at	One-to-Zero-One-or-More	Identifying
NODE-SYSTEM	NODE	is supported by	One-to-Zero-One-or-More	Identifying
NODE-SYSTEM	SYSTEM	supports the functions of	One-to-Zero-One-or-More	Identifying
NODE-SYSTEM-ASSET-OWNERSHIP {JCAPS}	NODE-SYSTEM	is owned according to	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-SYSTEM-ASSOCIATION {JCAPS}	NODE-SYSTEM	is the child for	One-to-Zero-One-or-More	Identifying
NODE-SYSTEM-ASSOCIATION {JCAPS}	NODE-SYSTEM	is the parent for	One-to-Zero-One-or-More	Identifying
NODE-SYSTEM-COST-MANAGEMENT {JCAPS}	NODE-SYSTEM	is funded with	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
NODE-SYSTEM-SOFTWARE-ITEM {JCAPS}	NODE-SYSTEM	employs	One-to-Zero-One-or-More	Identifying

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Child Entity Name	Parent Entity Name	Relationship Name	Cardinality and Null Option	Relationship Type
NODE-SYSTEM-SOFTWARE-ITEM {JCAPS}	SOFTWARE-ITEM	is employed at	One-to-Zero-One-or-More	Identifying
NODE-SYSTEM-TRANSMISSION {JCAPS}	NODE-SYSTEM	communicates according to	One-to-Zero-One-or-More	Identifying
NODE-TASK	NODE	performs	One-to-Zero-One-or-More	Identifying
NODE-TASK	TASK	is performed by	One-to-Zero-One-or-More	Identifying
NODE-TREE	DOCUMENT	is a	Is a	Subtype
NODE-TREE-NODE-HIERARCHY	NODE-HIERARCHY	defines	One-to-Zero-One-or-More	Identifying
NODE-TREE-NODE-HIERARCHY	NODE-TREE	is defined by	One-to-Zero-One-or-More	Identifying
OPERATIONAL-ARCHITECTURE	ARCHITECTURE	is a	Is a	Subtype
OPERATIONAL-ARCHITECTURE	MISSION	is cited for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
OPERATIONAL-MISSION-THREAD	CAVEATED-SECURITY-CLASSIFICATION	pertains to	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
OPERATIONAL-MISSION-THREAD	MISSION	is cited for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
OPERATIONAL-MISSION-THREAD	OPERATIONAL-SCENARIO	applies to	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
OPERATIONAL-MISSION-THREAD-ELEMENT	INFO-EXCH-REQ (EXCH-NEED-LINE-IER in CADM 2.0)	is used in	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
OPERATIONAL-MISSION-THREAD-ELEMENT	OPERATIONAL-MISSION-THREAD	uses	One-to-Zero-One-or-More	Identifying
ORGANIZATION	ORGANIZATION-ECHELON-TYPE	defines	One-to-Zero-One-or-More No Nulls	Non-identifying
ORGANIZATION	ORGANIZATION-TYPE	is the type of	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ORGANIZATION-ASSOCIATION	ARCHITECTURE	applies to	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ORGANIZATION-ASSOCIATION	ORGANIZATION	is ordinate for	One-to-Zero-One-or-More	Identifying
ORGANIZATION-ASSOCIATION	ORGANIZATION	is subordinate for	One-to-Zero-One-or-More	Identifying
ORGANIZATION-LOCATION-POINT	LOCATION	locates	One-to-Zero-One-or-More	Identifying
ORGANIZATION-LOCATION-POINT	ORGANIZATION	occupies/is occupied by	One-to-Zero-One-or-More	Identifying
ORGANIZATION-LOCATION-POINT	POINT	locates	One-to-Zero-One-or-More	Identifying
ORGANIZATION-TYPE	COUNTRY	pertains to	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ORGANIZATION-TYPE	ORGANIZATION-ICON	depicts	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ORGANIZATION-TYPE-ASSOCIATION {ASA}	ARCHITECTURE	applies to	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ORGANIZATION-TYPE-ASSOCIATION {ASA}	EXCHANGE-RELATIONSHIP-TYPE {ASA, C4RDP}	describes	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
ORGANIZATION-TYPE-ASSOCIATION {ASA}	ORGANIZATION-TYPE	is ordinate for	One-to-Zero-One-or-More	Identifying
ORGANIZATION-TYPE-ASSOCIATION {ASA}	ORGANIZATION-TYPE	is subordinate to	One-to-Zero-One-or-More	Identifying
POINT	GEOMETRIC-SPATIAL-ELEMENT	is a	Is a	Subtype
POINT-OF-CONTACT	COUNTRY	pertains to	Zero-or-One-to-Zero-One-or-More	Non-identifying

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Child Entity Name	Parent Entity Name	Relationship Name	Cardinality and Null Option	Relationship Type
POINT-OF-CONTACT	ORGANIZATION	has	More Nulls Allowed	Non-identifying
POINT-OF-CONTACT	UNIFORMED-SERVICE-RANK	is held by	More Nulls Allowed	Non-identifying
POINT-OF-CONTACT	UNITED-STATES-STATE	applies to	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
PROCESS-ACTIVITY-ASSOCIATION (JCAPS)	PROCESS-ACTIVITY	is parent for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Identifying
PROCESS-ACTIVITY-ASSOCIATION (JCAPS)	PROCESS-ACTIVITY	is the child in	One-to-Zero-One-or-More	Identifying
PROCESS-ACTIVITY-TASK	ACTIVITY-MODEL	is cited by	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
PROCESS-ACTIVITY-TASK	PROCESS-ACTIVITY	corresponds to	One-to-Zero-One-or-More	Identifying
PROCESS-ACTIVITY-TASK	TASK	corresponds to	One-to-Zero-One-or-More	Identifying
REQUIRED-INTEROPERABILITY-CAPABILITY	CAPABILITY	is attained for	One-to-Zero-One-or-More	Identifying
REQUIRED-INTEROPERABILITY-CAPABILITY	CONDITION	delimits	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
REQUIRED-INTEROPERABILITY-CAPABILITY	IMPLEMENTATION-TIME-FRAME	is cited for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
REQUIRED-INTEROPERABILITY-CAPABILITY	INTEROPERABILITY-REQUIREMENT	specifies	One-to-Zero-One-or-More	Identifying
SECURITY-ACCESS-COMPARTMENT	SECURITY-CLASSIFICATION	pertains to existence of	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SOFTWARE-ITEM	MATERIEL-ITEM	may be a	One-to-Zero-or-One (Z)	Identifying
SOFTWARE-ITEM	ORGANIZATION	is source for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SOFTWARE-ITEM	SOFTWARE-APPLICATION	may be a	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SOFTWARE-ITEM-ASSOCIATION (ASA)	SOFTWARE-ITEM	is ordinate for	One-to-Zero-One-or-More	Identifying
SOFTWARE-ITEM-ASSOCIATION (ASA)	SOFTWARE-ITEM	is subordinate to	One-to-Zero-One-or-More	Identifying
STANDARD	AGREEMENT	is a	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Subtype
SYSTEM	SYSTEM-TYPE	is the type of	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SYSTEM-ARCHITECTURE	ARCHITECTURE	is a	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Subtype
SYSTEM-ASSOCIATION	CAVEATED-SECURITY-CLASSIFICATION	pertains to	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SYSTEM-ASSOCIATION	SYSTEM	is ordinate for	One-to-Zero-One-or-More	Identifying
SYSTEM-ASSOCIATION	SYSTEM	is subordinate to	One-to-Zero-One-or-More	Identifying
SYSTEM-CAPABILITY	CAPABILITY	is performed by	One-to-Zero-One-or-More	Identifying
SYSTEM-CAPABILITY	IMPLEMENTATION-TIME-FRAME	defines applicability time frame for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SYSTEM-CAPABILITY	SYSTEM	performs to	One-to-Zero-One-or-More	Identifying
SYSTEM-CAPABILITY	SYSTEM-PROCESS-ACTIVITY	provides	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SYSTEM-EQUIPMENT-TYPE	EQUIPMENT-TYPE	is used in	One-to-Zero-One-or-More	Identifying

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Child Entity Name	Parent Entity Name	Relationship Name	Cardinality and Null Option	Relationship Type
SYSTEM-EQUIPMENT-TYPE	SYSTEM	uses	One-to-Zero-One-or-More	Identifying
SYSTEM-FUNCTION	FUNCTIONAL-AREA	is supported by	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SYSTEM-FUNCTION	PROCESS-ACTIVITY		Is a	Subtype
SYSTEM-INTERFACE-DESCRIPTION {SV-1}	DOCUMENT		Is a	Subtype
SYSTEM-INTERFACE-DESCRIPTION-ELEMENT	SYSTEM-ASSOCIATION-MEANS	defines	One-to-Zero-One-or-More No Nulls	Non-identifying
SYSTEM-INTERFACE-DESCRIPTION-ELEMENT	SYSTEM-INTERFACE-DESCRIPTION {SV-1}	is defined by	One-to-Zero-One-or-More	Identifying
SYSTEM-INTERFACE-TYPE {JCAPS}	INTERFACE-TYPE {JCAPS}	applies to	One-to-Zero-One-or-More	Identifying
SYSTEM-INTERFACE-TYPE {JCAPS}	SYSTEM	has	One-to-Zero-One-or-More	Identifying
SYSTEM-ORGANIZATION	ORGANIZATION	has association with	One-to-Zero-One-or-More	Identifying
SYSTEM-ORGANIZATION	POINT-OF-CONTACT	is cited for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SYSTEM-ORGANIZATION	SYSTEM	is associated to	One-to-Zero-One-or-More	Identifying
SYSTEM-SECURITY-CLASSIFICATION	CAVEATED-SECURITY-CLASSIFICATION	is cited for	One-to-Zero-One-or-More	Identifying
SYSTEM-SECURITY-CLASSIFICATION	SYSTEM	is designed to satisfy	One-to-Zero-One-or-More	Identifying
SYSTEM-SOFTWARE-ITEM	SOFTWARE-ITEM	is used in	One-to-Zero-One-or-More	Identifying
SYSTEM-SOFTWARE-ITEM	SYSTEM	uses	One-to-Zero-One-or-More	Identifying
SYSTEM-SYSTEM-MATRIX {SV-3}	DOCUMENT		Is a	Subtype
SYSTEM-SYSTEM-MATRIX-ELEMENT	PERIOD	is cited for	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SYSTEM-SYSTEM-MATRIX-ELEMENT	SYSTEM-ASSOCIATION-MEANS	is cited in	Zero-or-One-to-Zero-One-or-More Nulls Allowed	Non-identifying
SYSTEM-SYSTEM-MATRIX-ELEMENT	SYSTEM-SYSTEM-MATRIX {SV-3}	is specified using communications according to	One-to-Zero-One-or-More	Identifying
SYSTEM-SYSTEM-MATRIX-ELEMENT	SYSTEM	is child in	One-to-Zero-One-or-More	Identifying
SYSTEM-TYPE-ASSOCIATION {JCAPS}	SYSTEM-TYPE	is parent in	One-to-Zero-One-or-More	Identifying
SYSTEM-TYPE-ASSOCIATION {JCAPS}	SYSTEM-TYPE	is ordinate for	One-to-Zero-One-or-More	Identifying
TASK-ASSOCIATION	TASK	is subordinate to	One-to-Zero-One-or-More	Identifying
TASK-ASSOCIATION	MISSION-AREA	is supported by	One-to-Zero-One-or-More	Identifying
TASK-ASSOCIATION	TASK	supports	One-to-Zero-One-or-More	Identifying
TASK-MISSION-AREA	ARCHITECTURE		Is a	Subtype
TECHNICAL-ARCHITECTURE	ARCHITECTURE	is supplemented by	One-to-Zero-One-or-More	Identifying
USER-DEFINED-PROPERTY {JCAPS}	ARCHITECTURE	has	One-to-Zero-One-or-More	Identifying
USER-DEFINED-PROPERTY {JCAPS}	USER-DEFINED-PROPERTY-DICTIONARY {JCAPS}			
USER-DEFINED-PROPERTY-DICTIONARY-ENUMERATION {JCAPS}	USER-DEFINED-PROPERTY-DICTIONARY {JCAPS}	has	One-to-Zero-One-or-More	Identifying

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Annex K (Proposed Attribute Specifications)

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Proposed JCAPS View of CADM

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ANNEX M. PROPOSED JCAPS ATTRIBUTE SPECIFICATIONS

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Annex M (Proposed Attribute Specifications)

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Proposed JCAPS View of the CADM

Table M-1. Proposed JCAPS View of CADM (1,038 Attributes)—Attribute Specifications

Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
AGREEMENT	AGREEMENT CATEGORY CODE	AGR_cat_cod	String	char(1)	NULL	No	No	(16086) (A) THE CODE THAT REPRESENTS A CLASSIFICATION OF AN AGREEMENT.	C--CUSTOMIZED; S--STANDARD; P--Standard Profile (new); R--Reference Model (new). [1-character (max) string]
AGREEMENT	AGREEMENT DURATION TYPE CODE	AGR_dur_ty_cod	String	char(1)	NULL	No	No	(13787) (A) THE CODE THAT REPRESENTS A SPECIFIC KIND OF TIME FRAME ASSOCIATED WITH AN AGREEMENT.	F--FIXED-LENGTH; O--OPEN-ENDED. 1-character (max) string
AGREEMENT	AGREEMENT EFFECTIVE DATE	AGR_eff_dt	Date	datetime	NULL	No	No	(12836) (A) THE DATE WHEN AN AGREEMENT BECOMES EFFECTIVE.	
AGREEMENT	AGREEMENT Expiration Date	AGR_expir_dt	Date	datetime	NULL	No	No	The date at which an AGREEMENT is no longer in force.	
AGREEMENT	AGREEMENT IDENTIFIER	AGR_id	Id(int)	int	NOT NULL	Yes	No	(12495) (A) THE IDENTIFIER THAT REPRESENTS AN AGREEMENT.	
AGREEMENT	AGREEMENT NAME	AGR_nm	String	varchar(100)	NULL	No	No	(12882) (A) THE NAME OF AN AGREEMENT.	
AGREEMENT	AGREEMENT TEXT	AGR_tx	String	varchar(50)	NULL	No	No	(13925) (A) THE TEXT OF AN AGREEMENT.	
AGREEMENT	AGREEMENT TYPE CODE	AGR_ty_cod	String	varchar(4)	NULL	No	No	(12683/3) (A) THE CODE THAT REPRESENTS A SPECIFIC KIND OF AGREEMENT.	A--CONTRACTING AGREEMENT; AH--UNION; B--LEGAL AGREEMENT; C--INTERNATIONAL AGREEMENT; CN--NAME CHANGE AGREEMENT; D--PERSONNEL AGREEMENT; E--UNDERSTANDING AGREEMENT; FPRA--FORWARD PRICING RATE AGREEMENT; KG--GRANT; MA--MASTER AGREEMENT; NOVA--NOVATION AGREEMENT [DDDS, June 1998]; CADM proposes to add Standard, Standard Profile, Reference Model, and Convention. DDDS has proposal (12683/4, developmental status) to add: BL--BAILMENT, EFT--ELECTRONIC FUNDS TRANSFER AGREEMENT, and KA--COOPERATIVE AGREEMENT. [4-character (max) string]
AGREEMENT	AGREEMENT Version Identifier	AGR_ver_s_id	String	varchar(20)	NULL	No	No	The identifier of a specific release of a specific AGREEMENT.	
AGREEMENT	Coordinating ORGANIZATION Identifier	ORG_id	Id(int)	int	NULL	No	Yes	(7875/1) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	
ARCHITECTURE	Architect POC Identifier {JCAPS}	architect_poc_id	Id(int)	int	NULL	No	No	NAME OF THE ARCHITECT	Source: JCAPS 2.1 (ARCHITECT_NAME).
ARCHITECTURE	ARCHITECTURE Completion Date	ARCH_cmpln_dt	Date	datetime	NULL	No	No	The date on which a specific ARCHITECTURE was finished.	
ARCHITECTURE	ARCHITECTURE Description Text	ARCH_desc_tx	Text(255)	varchar(255)	NULL	No	No	The text that summarizes a specific ARCHITECTURE.	
ARCHITECTURE	ARCHITECTURE Identifier	ARCH_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a specific ARCHITECTURE.	
ARCHITECTURE	ARCHITECTURE Name	ARCH_nm	Name	varchar(50)	NULL	No	No	The name of a specific ARCHITECTURE.	
ARCHITECTURE	ARCHITECTURE Objective Text	ARCH_objv_tx	Text(255)	varchar(255)	NULL	No	No	The text that describes the aim of a specific ARCHITECTURE.	

Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
ARCHITECTURE	ARCHITECTURE Purpose Constraint Text {JCAPS}	ARCH_purp_cnstr_tx	String	varchar(2000)	NULL	No	No	THE CONSTRAINTS GIVEN FOR THIS ARCHITECTURE'S PURPOSE	Source: JCAPS 2.1 (AR_PURP_CONSTRAINTS).
ARCHITECTURE	ARCHITECTURE Scope Text	ARCH_scope_tx	Text(255)	varchar(255)	NULL	No	No	The text that describes the extent of applicability for a specific ARCHITECTURE.	
ARCHITECTURE	ARCHITECTURE Status Code {JCAPS}	ARCH_status_cd	Code_smallint	smallint	NULL	No	No	THE CURRENT STATUS OF THE ARCHITECTURE	1 = Under Development; 2 = Draft; 3 = Complete; 4 = Under Analysis; 8 = Not specified; 9 = Not known. Source: JCAPS IDD for JCAPS 2.1 (STATUS).
ARCHITECTURE	ARCHITECTURE Summary Description Text {JCAPS}	ARCH_summary_desc_tx	String	varchar(2000)	NULL	No	No	TEXT WHICH DESCRIBES THE ARCHITECTURE	Source: JCAPS 2.1 (SUMMARY_DTX).
ARCHITECTURE	ARCHITECTURE Time Frame Type Code	ARCH_tmfrm_ty_cd	Code_smallint	smallint	NULL	No	No	The code that denotes the class of time frame addressed by a specific ARCHITECTURE.	1--As is; 2--To be; 8--Not specified; 9--Not known.
ARCHITECTURE	ARCHITECTURE View Type Code	ARCH_vw_ty_cd	Code_smallint	smallint	NULL	No	No	The code that denotes a specific class of ARCHITECTURE.	1--Operation Architecture View; 2--System Architecture View; 3--Technical Architecture View; 4--All view; 5--Other; 8--Not Known; 9--Not Specified. See C4ISR Architecture Framework.
ARCHITECTURE	CAVEATED-SECURITY-CLASSIFICATION IDENTIFIER	CSC_ID	Id(int)	int	NULL	No	Yes	(16225/1) (A) THE IDENTIFIER OF A CAVEATED-SECURITY-CLASSIFICATION. NOTE: BLOCKS OF IDENTIFIERS WILL BE ALLOCATED TO DEFENSE ORGANIZATIONS. IT WILL BE UP TO EACH DEFENSE ORGANIZATION TO ALLOCATE AND CONFIGURATION MANAGE ITS OWN IDENTIFIERS.	
ARCHITECTURE	PROCESS-ACTIVITY IDENTIFIER	PA_id	Id(int)	int	NULL	No	Yes	(29165/2) (A) THE IDENTIFIER THAT REPRESENTS A PROCESS-ACTIVITY.	
ARCHITECTURE	SECURITY-CLASSIFICATION CODE	SC_cd	Code_smallint	smallint	NULL	No	Yes	(26900/3) (A) THE CODE THAT REPRESENTS A SECURITY-CLASSIFICATION. (DDDS, 10 August 2000)	01 = CONFIDENTIAL; 02 = CONFIDENTIAL RESTRICTED; 03 = FOR OFFICIAL USE ONLY; 04 = NATO CONFIDENTIAL; 05 = NATO CONFIDENTIAL ATOMAL; 06 = NATO RESTRICTED; 07 = NATO SECRET; 08 = NATO SECRET ATOMAL; 09 = NATO TOP SECRET; 10 = NATO TOP SECRET ATOMAL; 11 = SECRET; 12 = SECRET RESTRICTED; 13 = TOP SECRET; 14 = UNCLASSIFIED; 15 = UNCLASSIFIED SENSITIVE; 98 = NOT SPECIFIED; 99 = NOT KNOWN (DDDS, 10 August 2000)
ARCHITECTURE	Time Frame PERIOD Identifier	TmFrm_PER_id	Id(int)	int	NULL	No	Yes	(12180) (A) THE IDENTIFIER THAT REPRESENTS A PERIOD.	
ARCHITECTURE-AGREEMENT	AGREEMENT IDENTIFIER	AGR_id	Id(int)	int	NOT NULL	Yes	Yes	(12495) (A) THE IDENTIFIER THAT REPRESENTS AN AGREEMENT.	
ARCHITECTURE-AGREEMENT	ARCHITECTURE Identifier	ARCH_id	Id(int)	int	NOT NULL	Yes	Yes	The identifier of a specific ARCHITECTURE.	
ARCHITECTURE-AGREEMENT	ARCHITECTURE-AGREEMENT Identifier	ARCHA_GR_id	Id(int)	int	NOT NULL	Yes	No	The identifier of an ARCHITECTURE-AGREEMENT for a specific ARCHITECTURE and a specific instance of AGREEMENT.	
ARCHITECTURE-AGREEMENT	ARCHITECTURE-AGREEMENT Role Code	ARCHA_GR_role_cd	Code_smallint	smallint	NULL	No	No	The code that represents the class of relationship that a AGREEMENT has for an ARCHITECTURE.	1 = Mandates; 2 = References; 8 = Not specified; 9 = Not known.

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
ARCHITECTURE-ASSOCIATION	ARCHITECTURE-ASSOCIATION Effective Date	ARCH_A SSOC_ef f_dt	Date	datetime	NULL	No	No	The initiation of the validity of an ARCHITECTURE-ASSOCIATION.	
ARCHITECTURE-ASSOCIATION	ARCHITECTURE-ASSOCIATION Identifier	ARCH_A SSOC_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a specific ARCHITECTURE-ASSOCIATION for two specific ARCHITECTURES.	
ARCHITECTURE-ASSOCIATION	ARCHITECTURE-ASSOCIATION Type Code	ARCH_A SSOC_ty _cd	Code_smallint	smallint	NULL	No	No	The code that designates a specific class of ARCHITECTURE-ASSOCIATION.	1--Replaces; 2--Is part of; 3--Is a supplement for; 4--References; 5--Is equivalent to; 6--Conforms to; 7--Supports; 8--Not Specified; 9--Not Known.
ARCHITECTURE-ASSOCIATION	Ordinate ARCHITECTURE Identifier	Ord_AR CH_id	Id(int)	int	NOT NULL	Yes	Yes	The identifier of a specific ARCHITECTURE.	
ARCHITECTURE-ASSOCIATION	Subordinate ARCHITECTURE Identifier	Sub_AR CH_id	Id(int)	int	NOT NULL	Yes	Yes	The identifier of a specific ARCHITECTURE.	
ARCHITECTURE-DOCUMENT	ARCHITECTURE Identifier	ARCH_id	Id(int)	int	NOT NULL	Yes	Yes	The identifier of a specific ARCHITECTURE.	
ARCHITECTURE-DOCUMENT	ARCHITECTURE-DOCUMENT Description Text (JCAPS)	ARCHD OC_desc r_tx	String	varchar(2000)	NULL	No	No	THE FREEFORM NARRATIVE THAT CHARACTERIZES AN ARCHITECTURE-DOCUMENT.	Source: JCAPS 2.1 (AR_DOC_DTX).
ARCHITECTURE-DOCUMENT	ARCHITECTURE-DOCUMENT Identifier	ARCHD OC_id	Id(int)	int	NOT NULL	Yes	No	The identifier of an ARCHITECTURE-DOCUMENT for a specific ARCHITECTURE and a specific DOCUMENT.	
ARCHITECTURE-DOCUMENT	ARCHITECTURE-DOCUMENT Role Code	ARCHD OC_role_cd	Code_smallint	smallint	NULL	No	No	The code that represents the class of relationship that a DOCUMENT has for an ARCHITECTURE.	1 = Is described in; 2 = Is promulgated by; 3 = Cites; 4 = Has a product in the form of; 8 = Not specified; 9 = Not known.
ARCHITECTURE-DOCUMENT	DOCUMENT IDENTIFIER	DOC_ID	Id(int)	int	NOT NULL	Yes	Yes	(9643/2) (A) THE IDENTIFIER THAT REPRESENTS A DOCUMENT.	
ARCHITECTURE-INTEROPERABILITY-REQUIREMENT	ARCHITECTURE Identifier	ARCH_id	Id(int)	int	NOT NULL	Yes	Yes	The identifier of a specific ARCHITECTURE.	
ARCHITECTURE-INTEROPERABILITY-REQUIREMENT	ARCHITECTURE-INTEROPERABILITY-REQUIREMENT Identifier	ARCH_I NOPRE Q_id	Id(int)	int	NOT NULL	Yes	No	The identifier of an ARCHITECTURE-REQUIREMENT for a specific ARCHITECTURE and a specific instance of REQUIREMENT.	
ARCHITECTURE-INTEROPERABILITY-REQUIREMENT	ARCHITECTURE-INTEROPERABILITY-REQUIREMENT Use Code	ARCH_I NOPRE Q_us_cd	Code_smallint	smallint	NULL	No	No	The code that designates how a REQUIREMENT applies to a specific ARCHITECTURE.	01--Activity Model; 02--Data Model; 03--Exchange Need Line; 04--Information Exchange Requirement; 05--Operational Concept; 06--Usage Requirement; 07--Deployment Requirement; 08--Force Structure Requirement; 09--Modernization Requirement; 10--Readiness Requirement; 11--Support Requirement; 12--Sustainability Requirement; 98--Not Specified; 99--Not Known. Added for Army CADM. 13--Information Requirement.

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
ARCHITECTURE-INTEROPERABILITY-REQUIREMENT	Interop Req GUIDANCE Identifier	InteropReq_GUID_id	Id(int)	int	NOT NULL	Yes	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
ARCHITECTURE-NODE	ARCHITECTURE Identifier	ARCH_id	Id(int)	int	NOT NULL	Yes	Yes	The identifier of a specific ARCHITECTURE.	
ARCHITECTURE-NODE	ARCHITECTURE-NODE Identifier	ARCH_NODE_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a specific ARCHITECTURE-NODE for a specific ARCHITECTURE and a specific NODE.	
ARCHITECTURE-NODE	ARCHITECTURE-NODE Role Code	ARCH_NODE_role_cd	Code_smallint	smallint	NULL	No	No	The code that designates the specific way in which a NODE is used in the ARCHITECTURE of an ARCHITECTURE-NODE. 1--Specifies networks using; 2--Specifies system hierarchy using; 3--Specifies organizational hierarchy using; 8--Not Known; 9--Not Specified.	
ARCHITECTURE-NODE	NODE Identifier	NODE_ID	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
ARCHITECTURE-ORGANIZATION	ARCHITECTURE Identifier	ARCH_id	Id(int)	int	NOT NULL	Yes	Yes	The identifier of a specific ARCHITECTURE.	
ARCHITECTURE-ORGANIZATION	ARCHITECTURE-ORGANIZATION Date	ARCH_ORG_dt	Date	datetime	NULL	No	No	The date of a specific ARCHITECTURE-ORGANIZATION.	
ARCHITECTURE-ORGANIZATION	ARCHITECTURE-ORGANIZATION Identifier	ARCH_ORG_id	Id(int)	int	NOT NULL	Yes	No	The identifier of an ARCHITECTURE-ORGANIZATION for a specific ARCHITECTURE and a specific ORGANIZATION.	
ARCHITECTURE-ORGANIZATION	ARCHITECTURE-ORGANIZATION Role Code	ARCH_ORG_role_cd	Code_smallint	smallint	NULL	No	No	The code that denotes the function of a specific ORGANIZATION for a specific ARCHITECTURE. 1 = Is structured under the control of; 2 = Is developed by; 3 = Is managed by; 4 = Is referenced by; 5 = Is executed by; 6 = Is supported by; 7 = Is planned by; 8 = Is supported by; 9 = Is the architect of; 10 = Is implemented by; 98 = Not specified; 99 = Not known.	
ARCHITECTURE-ORGANIZATION	ORGANIZATION IDENTIFIER	ORG_id	Id(int)	int	NOT NULL	Yes	Yes	(7875/1) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	
ARCHITECTURE-TASK	ARCHITECTURE Identifier	ARCH_id	Id(int)	int	NOT NULL	Yes	Yes	The identifier of a specific ARCHITECTURE.	
ARCHITECTURE-TASK	ARCHITECTURE-TASK Leaf Indicator Code	ARCHTASK_leaf_ind_cd	Code_smallint	smallint	NULL	No	No	The code the represents whether the TASK is not further decomposed in the ARCHITECTURE. 1 = Not further decomposed; 2 = Further decomposed; 3 = Not specified; 4 = Not known. Source: ASA Data Model (PEO-C3S). IERS are not defined for tasks that are further decomposed for the ARCHITECTURE.	
ARCHITECTURE-TASK	TASK IDENTIFIER	TSK_id	Id(int)	int	NOT NULL	Yes	Yes	(9282) (A) THE IDENTIFIER THAT REPRESENTS A TASK.	
BATTLEFIELD-AUTOMATED-SYSTEM {ASA, C4RDP}	BATTLEFIELD-AUTOMATED-SYSTEM Approval Status Code	BAS_approval_status_cd	Approval Status Code	char(1)	NULL	No	No	The code that denotes the level of validity and/or approval for the data for a BATTLEFIELD-AUTOMATED-SYSTEM. A = Approved; R = Requested; N = Notational; M = Modeling & Simulation; D = Disapproved; X = Archived. Source: C4RDP, Battlefield-Automated-System Approval-Status Code--The code that denotes the level of validity and/or approval for the data for a Battlefield Automated System.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Domain Note	
BATTLEFIELD-AUTOMATED-SYSTEM (ASA, C4RDP)	BATTLEFIELD-AUTOMATED-SYSTEM Code	BAS_Cd	String	char(20)	NULL	No	No	The code that represents a BATTLEFIELD-AUTOMATED-SYSTEM.	25(D)(L)MRS; 6(D)(L) CTIS; AADSACS; ACPs; ACS; ADCIS; ADLER; AEPDS; AFATDS; AFCS; ARES; ALCOM CTIS; AMPDWS; AMOS; ANTSQ-73 (BDE); AOCESS; ASAS-ACE; ASAS-CCS; ASAS-COLLATERAL; ASAS-EACIC; ASAS-SUB; ASAS-TCAE; ASSSC; ASWBPL; ATCAE; ATDS; ATHS; AUSTACCS; AVMS; AWACS; AWIS; BATES; BCS; BETA-J; BICES; BICS; BLIS; BSMS-K; BVTC; CAPS-II; CARMS; CBS-X; CDA; CHATS; CHCS; CHCS-II; CIRCE; CMOS; COINS; Collab Planning; CORPS ADA BDE ABMOC; CRUSADER; CSSCS; CTAPS; CTAPS (INTEL); DAAS; DAMMS-R; DASPS-E; DBSS; DDSS; DIAOLS; DMD (TF); DMLSS; DMS; DS4; DTSS; DVIS; DWRS; DX-CEM; EDAS; ENHANCED TRACKWOLF; EPDS; ETUT; FAAD A2C2 LNO; FAAD BN ABMOC; FAAD BTRY CP; FAAD C3I; FAAD MSC LNO; FAAD PLT/SEC CP; FAAD SENSOR C2; FAAD WPN IWCS/IWSD; FBCB2; FBS; FCS; FDDM; FDS (MLRS); FED; FF TPQ-36; FF TPQ-37; FIST DMD; FOS; GAPEWS; GCSS-ARMY; GCSS-ARMY; GEADGE; GRCS ARF; GRCS-IPF; GTN; HEROS; IDM; IEWCS; IFIS; IFSAS; IGRV ARF; IGRV-IPF; IMBC; IMETS; IMETS; INDRSA; IPDS; ISYSCON; ITAADS; ITAWDS; JDSS; JISS/JAIS; JMCIS (NTCS-A); JSS; JSTARS-ARP; JSTARS-GSM (BLOCK I); JSTARS-GSM(BLOCK II); JTIDS EQUIPD A/CRAFT; KAIS; KISS; LFCCIS (ACIS); LIF; LOGMARS-A; LOGMARS-M; LOGMARS-S; LOGMARS-T; LOGSA; LTACFIRE; MAGIS IAS; MAMS; MC4; MC4 - TYPE 1; MC4 - TYPE 2; MC4 - TYPE 3; MC4 - TYPE 4; MCRC; MCS; MCS-AD; MCS-AMPS; MCS-ANBACIS; MCS-CSS; MCS-FS; MCS-IEW; MCS-IVIS; MDS; MEDASM; MEDBLD; Medical Anchor Desk; MEDLOG-D; MEDMNT; MEDMNT; MEDOPT; MEDPAR; MEDPAR-D; MEDREG; MEDSUP; MFFIMS; MICAD; MICAD; MMS; MRM; MTS; MTS; NA; NAEW; NAFISS; NAOMIS; NAT-INTEL-SYSTEM; NCS-EPLRS; NTDs (AEGIS); NTVS; OSC; PACCMS; PATRIOT ECS; PATRIOT ICC; PERRMS; PHOENIX; PIC; PLDMD; PMSS; PWIS-2; QRMP; QUICKFIX IIB; QUICKLOOK II; QUICKLOOK-GPF; RAPIDE; RCAS; RWER; RPPAS; SAAS; SAAS-1/3; SAAS-4; SAAS-DAO; SACRA; SAILS; SAMS-1; SAMS-2; SAMS-3; SAMS-W; SARSS-1; SARSS-1 (INTERIM); SARSS-2A; SARSS-2B; SIDPERS-3; SIS; SLAR; SPBS-R; SPBS-R(AV); SPORT/ETM-I; STACCS; STANFINS-R; STARCIPS; STARFIARS; SUMS; TAADS; TACC; TACCIMS; TACFIRE (BCD); TACFIRE (BN); TACJAM; TACS; TAIS; TAOM; TAPDB; TAPER; TARPMS; TAV; TC AIMS II; TCAC; TCAC (USMC); TOMS; TOC; TCS; TEAMMATE; TEAMPACK; TECCS; TERMS; THAAD TOC; TIBS; TMAMS; TMIP; TOP GABLE/SSP-S; TOP GALLANT/SSP-S; TOP GRAPHIC/SSP-S; TOP SERIES/SSP-S; TRAC2ES; TRACKWOLF; TRAFFICJAM; TRAILBLAZER; TRAP; TREDs; TRIGs; UAV-C GCS; UAV-CR; UAV-E; UAV-MPCS; UAV-SR; ULLS; ULLS-A; ULLS-G; ULLS-S4; UMMIS; UTACCS; VFAS; VFMED; VTAADS; WARS; WAVELL; WESTIS; WPS; WWMCCS. Source, C4RDP: Battlefield-Automated-System Code--The code that represents the unique 20 character name of a Battlefield Automated System used to identify a Battlefield Automated System on a limited computer screen or printout.	

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Entity Name	Attribute Name	Col. Name	Do- main	Data- type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
BATTLEFIELD-AUTOMATED-SYSTEM (ASA, C4RDP)	BATTLEFIELD-AUTOMATED-SYSTEM Database Object Name	BAS_DB_Obj_Nm	String	varchar(9)	NULL	No	No	The name of an embedded database object, which can be a graphic, spreadsheet, document or any other object capable of being embedded in the database application, for a BATTLEFIELD-AUTOMATED-SYSTEM.	C4RDP, Battlefield-Automated-System Database-Object Name--The name of an embedded database object which can be a graphic, spreadsheet, document or any other object capable of being embedded in the database application.
BATTLEFIELD-AUTOMATED-SYSTEM (ASA, C4RDP)	BATTLEFIELD-AUTOMATED-SYSTEM Record Security Classification Code	BAS_rec_secl_cd	Security- Classi- fication	char(1)	NULL	No	No	The code that denotes the security classification of the metadata describing the Battlefield-Automated-System.	U = Unclassified, C = Confidential, S = Secret. Source: C4RDP, Battlefield-Automated-System Security-Classification Code--The code that denotes the security classification of the metadata describing the Battlefield-Automated-System.
BATTLEFIELD-AUTOMATED-SYSTEM (ASA, C4RDP)	BATTLEFIELD-FUNCTIONAL-AREA-PROONENT Code	BFA_PR_OP_cd	String	char(1)	NULL	No	Yes	The code which identifies one of the five Battlefield Functional Areas.	A = Maneuver; B = Fire Support; C = Intelligence/Electronic Warfare; D = Air Defense; E = Combat Service Support. Source: C4RDP, Battlefield-Functional-Area Code--The code which identifies one of the five Battlefield Functional Areas.
BATTLEFIELD-AUTOMATED-SYSTEM (ASA, C4RDP)	Information Processing System SYSTEM Identifier	SYS_id	Id(int)	int	NOT NULL	Yes	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
BATTLEFIELD-AUTOMATED-SYSTEM (ASA, C4RDP)	OPERATIONAL-FACILITY-PROONENT Code	OF_PRP_cd	String	char(1)	NULL	No	Yes	The code that represents a specific OPERATIONAL-FACILITY-PROONENT.	0--TRADOC; 1--JOINT; 2--Navy; 3--AIR FORCE; 4--MARINES; 5--North Atlantic Treaty Org; 6--OPFAC Council of Colonels; 7--Combined; 8--Host Nation; 9--CASCOC Integrator; A--Armor; B--Air Defense Artillery; C--Chemical; D--Medical; E--Engineer; F--Field Artillery; G--Military Police; H--Combined Arms Support Cmd; I--Infantry; J--Military Intelligence; K--Chaplain; L--Legal; M--Modeling and Simulation; N--Special Operations Command; O--Ordnance; P--Public Affairs Office; Q--Quartermaster; R--C4RDP PM; S--Signal; T--Transportation; U--Aviation/Aviation Log; V--Missile Munitions; X--Adjutant General; Y--Finance; Z--Combined Arms Command. Source: C4RDP, Proponent Code (The code that represents a Proponent.)
BATTLEFIELD-AUTOMATED-SYSTEM (ASA, C4RDP)	OPERATIONAL-FACILITY-TRANSACTION-DETAIL Identifier	OFTRDT_L_id	Id(int)	int	NULL	No	Yes	The quantity of the database-generated key that represents the database table in which the transaction occurred.	Transaction-Detail Key Quantity
CAPABILITY	CAPABILITY Description Text	CAP_des_or_tx	String	varchar(150)	NULL	No	No	The text that summarizes a specific CAPABILITY.	
CAPABILITY	CAPABILITY IDENTIFIER	CAP_id	Id(int)	int	NOT NULL	Yes	No	(11287) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC CAPABILITY.	The following instances of CAPABILITY are needed: Mean Time Between Failures, Mean Time Between Software Faults; Availability; System Initialization Time; Data Transfer Rate; Program Restart Time; Data Throughput/Capacity; Input Type Response Time; Operator Interaction Type Response Time. [10-character (max) string]

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
CAPABILITY	CAPABILITY MEASUREMENT UNIT CODE	CAP_meas_unit_code	Code_smallint	smallint	NULL	No	No	(11411) (A) THE CODE THAT DENOTES THE INCREMENTAL UNIT BY WHICH THE PERFORMANCE OF A CAPABILITY IS MEASURED.	01--TONS PER HOUR; 02--UNITS PER HOUR (E.G., DEPARTURES PER HOUR); 03--PEOPLE PER HOUR; 04--ROUNDS PER MINUTE; 05--KILOMETERS PER HOUR; 06--HOURS; 07--KILOMETERS; 08--SECONDS; 09--LITRES; 10--CUBIC METRES; 11--KILOGRAMS; 12--METRIC TONS; 13--UNITS OF (EACH; COUNT OF NO DIMENSION); 14--POUNDS PER SQUARE INCH (PSI) (E.G., APRON-TYPE CAPACITY RATE); 15--(HUMAN) LABOR HOURS PER DAY (E.G., CONSTRUCTION RATE); 16--SHORT TON (2,000 LB) (E.G., LIFTING OR CARGO CAPACITY WEIGHT); 17--METRIC TON (1,000 KG); 18--POUNDS (E.G., EQUIVALENT SINGLE-WHEEL LOAD CAPACITY WEIGHT); 19--SHORT TONS PER DAY (E.G., CARGO CLEARANCE RATE); 20--UNITS PER DAY (E.G., PASSENGERS PER DAY; SHIPS PER DAY); 21--SQUARE FEET PER DAY (E.G., BREAKBULK CARGO DISCHARGE RATE); 22--GALLONS PER MINUTE (E.G., PUMPING RATE); 23--GALLONS PER DAY (E.G., FUEL RESUPPLY RECEPTION CAPABILITY RATE); 24--MEASUREMENT TONS PER DAY (E.G., VOLUMETRIC CARGO DISCHARGE RATE); 25--THOUSANDS OF PETROLEUM BARRELS PER DAY (E.G., POL CLEARANCE CAPACITY RATE). [2-character (max) string]
CAPABILITY	CAPABILITY Name	CAP_nm	Name	varchar(50)	NULL	No	No	The name of a specific CAPABILITY.	
CAPABILITY	CAPABILITY TYPE CODE	CAP_type_code	Code_smallint	smallint	NULL	No	No	(11410) (A) THE CODE THAT DENOTES A SPECIFIC ABILITY.	001--MOVE EARTH; 002--LAY MINES; 003--CARRY PEOPLE; 004--OVERHAUL EQUIPMENT; 005--CLEAR MINES; 006--REFUEL AIRCRAFT; 007--BOMB TARGETS; 008--OFFLOAD CARGO; 009--ONLOAD CARGO; 010--TRANSPORT CARGO; 011--REPAIR EQUIPMENT; 012--LAUNCH WEAPONS; 013--FIRE MUNITIONS; 014--TRAIN PERSONNEL (DDDS, approved). Additional domain values for use in the CADM include: 101--Handle 102--Messages Per Day; 103--Update Database Rate; 104--Maximum Latency Duration. Examples from Framework 2.0 (Section A.2.2.10) include: 105--Mean time between failures, 106--Maintainability, 107--Availability, 108--System initialization time, 109--Data transfer rate, 110--Program restart time for platforms; and 111--Data throughput/capacity, 112--Response time, 113--Effectiveness, 114--Mean time between software failures for application software. [3-character (max) string]
CAVEATED-SECURITY-CLASSIFICATION	CAVEATED-SECURITY-CLASSIFICATION ABBREVIATED TEXT	CSC_AB_BR_TX	String	varchar(100)	NULL	No	No	(56881/1) (A) THE TEXT OF A SPECIFIC CAVEATED-SECURITY-CLASSIFICATION IN A SHORTENED FORMAT.	
CAVEATED-SECURITY-CLASSIFICATION	CAVEATED-SECURITY-CLASSIFICATION Short Name	CSC_composite_name	Name	varchar(50)	NULL	No	No	The name of a specific CAVEATED-SECURITY-CLASSIFICATION.. Source: CADM-ASA Workshop (17-19 June 1998).	
CAVEATED-SECURITY-CLASSIFICATION	CAVEATED-SECURITY-CLASSIFICATION DESCRIPTION TEXT	CSC_DESCRIPTION_TX	Text(8000)	varchar(8000)	NULL	No	No	(59584/1) (A) THE TEXT THAT DESCRIBES A CAVEATED-SECURITY-CLASSIFICATION.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
CAVEATED-SECURITY-CLASSIFICATION	CAVEATED-SECURITY-CLASSIFICATION IDENTIFIER	CSC_ID	Id(int)	int	NOT NULL	Yes	No	(16225/1) (A) THE IDENTIFIER OF A CAVEATED-SECURITY-CLASSIFICATION. NOTE: BLOCKS OF IDENTIFIERS WILL BE ALLOCATED TO DEFENSE ORGANIZATIONS. IT WILL BE UP TO EACH DEFENSE ORGANIZATION TO ALLOCATE AND CONFIGURATION MANAGE ITS OWN IDENTIFIERS.	
CAVEATED-SECURITY-CLASSIFICATION	CAVEATED-SECURITY-CLASSIFICATION Proprietary Flag Code	CSC_prp_rtny_flg_cd	Code_smallint	smallint	NULL	No	No	The code that represents the logical value showing whether a CAVEATED-SECURITY-CLASSIFICATION is designated as "Proprietary Information". Source: CADM-ASA Workshop (17-19 June 1998).	1--True (proprietary information); 2--False (not proprietary information); 8--Not specified; 9--Not known.
CAVEATED-SECURITY-CLASSIFICATION	CAVEATED-SECURITY-CLASSIFICATION RELEASABILITY CODE	CSC_RL_S_CD	Code_smallint	smallint	NULL	No	No	(41947/2) (A) THE CODE THAT REPRESENTS THE DISTRIBUTION OF A SPECIFIC CAVEATED-SECURITY-CLASSIFICATION.	01 = DISTRIBUTION UNLIMITED; 02 = DOD ACCESS REPORT; 03 = DOD AND DOD CONTRACTORS ONLY; 04 = REPORT CONTROL SPECIAL DISSEMINATION LIMITATION; 05 = TECHNOLOGY DATA EXPORT CONTROL; 06 = US GOVERNMENT ACCESS ONLY; 07 = US GOVERNMENT AGENCIES AND THEIR CONTRACTORS ONLY; 08 = ORIGINATOR CONTROLLED; 98 = NOT SPECIFIED; 99 = NOT KNOWN (DDDS, 10 August 2000)
CAVEATED-SECURITY-CLASSIFICATION	CAVEATED-SECURITY-CLASSIFICATION RELEASABILITY REASON CODE	CSC_RL_S_RSN_CD	Code_smallint	smallint	NULL	No	No	(41948/2) (A) THE CODE THAT REPRESENTS THE UNDERLYING BASIS FOR THE DISTRIBUTION OF A SPECIFIC CAVEATED-SECURITY-CLASSIFICATION.	01 = ADMINISTRATIVE OR OPERATIONAL USE DATA; 02 = CRITICAL TECHNOLOGY; 03 = CONTRACTOR PERFORMANCE EVALUATION; 04 = DIRECT MILITARY SUPPORT; 05 = FOREIGN GOVERNMENT INFORMATION; 06 = PRECLUDE PREMATURE DISSEMINATION; 07 = PROPRIETARY INFORMATION; 08 = SOFTWARE DOCUMENTATION; 09 = SPECIFIC AUTHORITY; 10 = TEST AND EVALUATION; 98 = NOT SPECIFIED; 99 = NOT KNOWN (DDDS, 10 August 2000)
CAVEATED-SECURITY-CLASSIFICATION	CAVEATED-SECURITY-CLASSIFICATION Restricted Flag Code	CSC_res_tr_flg_cd	Code_smallint	smallint	NULL	No	No	The code that represents the logical value showing whether a CAVEATED-SECURITY-CLASSIFICATION is designated as "Restricted Data". Source: CADM-ASA Workshop (17-19 June 1998).	1--True (restricted data); 2--False (not restricted data); 3--Formerly Restricted Data (FRD); 8--Not specified; 9--Not known.

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
CAVEATED-SECURITY-CLASSIFICATION	CAVEATED-SECURITY-CLASSIFICATION SPECIAL HANDLING INSTRUCTION CODE	CSC_SP HND_IN STR_CD	Code_smallint	smallint	NULL	No	No	(16225/1) (A) THE CODE THAT REPRESENTS THE RELEASABILITY LIMITS ASSOCIATED WITH A CAVEATED-SECURITY-CLASSIFICATION. NOTE: THE SPECIAL HANDLING CODES CONTAIN RELEASABILITY RESTRICTIONS ON DOD FREQUENCY ASSIGNMENTS AND OTHER DOCUMENTS. THIS ELEMENT IS PART OF SFAF DATA ITEM 005. THE THREE PARTS OF DATA ITEM 005 IN THE ORDER LISTED ARE: SECURITY-CLASSIFICATION-TYPE CODE, SECURITY-CLASSIFICATION SPECIAL HANDLING INSTRUCTION CODE, AND SECURITY-CLASSIFICATION-DECLASSIFICATION CODE.	01 = APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED (DOD DIRECTIVE 5230.24); 02 = RELEASABLE TO SOIL COUNTRY AND THE NORTH ATLANTIC TREATY ORGANIZATION (NATO); OTHERWISE, NOT RELEASABLE OUTSIDE THE US GOVERNMENT IN ACCORDANCE WITH (IAW) SECTION 552(B)(1) OF TITLE 5 OF THE US CODE.; 03 = CRITICAL NUCLEAR WEAPON DESIGN INFORMATION; 04 = NOT RELEASABLE OUTSIDE THE US GOVERNMENT IAW SECTION 552(B)(1) OF TITLE 5 OF THE US CODE.; 05 = NOT RELEASABLE TO FOREIGN NATIONALS AND NOT RELEASABLE OUTSIDE THE US GOVERNMENT IAW SECTION 552(B)(1) OF TITLE 5 OF THE US CODE.; 06 = RELEASABLE TO SOIL COUNTRY ONLY; OTHERWISE, NOT RELEASABLE OUTSIDE THE US GOVERNMENT IAW SECTION 552(B)(1) OF TITLE 5 OF THE US CODE.; 07 = CONTINGENCY ASSIGNMENT - THE RECORD CONTAINS COMMANDER COMMENTS ONLY, NOT RELEASABLE TO FOREIGN NATIONALS UNLESS FORMALLY COORDINATED; OTHERWISE, NOT RELEASABLE OUTSIDE THE US GOVERNMENT IAW SECTION 552(B)(1) OF TITLE 5 OF THE US CODE.; 08 = PERMANENT ASSIGNMENT - AVAILABLE FOR CONTINGENCY USE WITHIN THE THEATER AFTER COORDINATION WITH AND APPROVAL OF THE COGNIZANT UNIFIED COMMANDER - RELEASABLE TO SOIL NATION; OTHERWISE, NOT RELEASABLE OUTSIDE US GOVERNMENT IAW SECTION 552 (B)(1) OF TITLE 5 OF THE US CODE.; 09 = SENSITIVE COMPARTMENTED INFORMATION (SCI), OTHERWISE, NOT RELEASABLE OUTSIDE THE US GOVERNMENT IAW SECTION 552 (B)(1) OF TITLE 5 OF THE US CODE.; 10 = RELEASABLE TO NATO; OTHERWISE, NOT RELEASABLE OUTSIDE US GOVERNMENT IAW SECTION 552 (B)(1) OF TITLE 5 OF THE US CODE.; 11 = NOT RELEASABLE TO CONTRACTORS OR CONSULTANTS (THIS CODE IS NO LONGER USED ON NEW DOCUMENTS); 12 = NOT RELEASABLE TO FOREIGN NATIONALS (THIS TERM IS BEING REPLACED BY "US ONLY"); 13 = DISSEMINATION AND EXTRACTION OF INFORMATION CONTROLLED; 14 = PROPRIETARY INFORMATION INVOLVED; OTHERWISE, NOT RELEASABLE OUTSIDE THE US GOVERNMENT IAW SECTION 552 (B)(1) OF TITLE 5 OF THE US CODE.; 15 = PROPRIETARY INFORMATION INVOLVED; 16 = SPECIAL CATEGORY (SPECAT); OTHERWISE, NOT RELEASABLE OUTSIDE THE US GOVERNMENT IAW SECTION 552 (B)(1) OF TITLE 5 OF THE US CODE.; 17 = SPECIAL ACCESS REQUIRED (SAR); OTHERWISE, NOT RELEASABLE OUTSIDE THE US GOVERNMENT IAW SECTION 552 (B)(1) OF TITLE 5 OF THE US CODE.; 18 = WARNING NOTICE - INTELLIGENCE SOURCES OR METHODS INVOLVED (THIS CODE IS NOT TO BE USED ON NEW DOCUMENT); 98 = NOT SPECIFIED; 99 = NOT KNOWN. (DDDS, 10 August 2000)
CAVEATED-SECURITY-CLASSIFICATION	SECURITY-ACCESS-COMPARTMENT IDENTIFIER	SAC_ID	Id(int)	int	NULL	No	Yes	(56872/1) (A) THE IDENTIFIER OF A SPECIFIC SECURITY-ACCESS-COMPARTMENT. NOTE: BLOCKS OF IDENTIFIERS WILL BE ALLOCATED TO DEFENSE ORGANIZATIONS. IT WILL BE UP TO EACH DEFENSE ORGANIZATION TO ALLOCATE AND CONFIGURATION MANAGE ITS OWN IDENTIFIERS.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
CAVEATED-SECURITY-CLASSIFICATION	SECURITY-CLASSIFICATION CODE	SC_cd	Code_smallint	smallint	NOT NULL	Yes	Yes	(26900/3) (A) THE CODE THAT REPRESENTS A SECURITY-CLASSIFICATION. (DDDS, 10 August 2000)	01 = CONFIDENTIAL; 02 = CONFIDENTIAL RESTRICTED; 03 = FOR OFFICIAL USE ONLY; 04 = NATO CONFIDENTIAL; 05 = NATO CONFIDENTIAL ATOMAL; 06 = NATO RESTRICTED; 07 = NATO SECRET; 08 = NATO SECRET ATOMAL; 09 = NATO TOP SECRET; 10 = NATO TOP SECRET ATOMAL; 11 = SECRET; 12 = SECRET RESTRICTED; 13 = TOP SECRET; 14 = UNCLASSIFIED; 15 = UNCLASSIFIED SENSITIVE; 98 = NOT SPECIFIED; 99 = NOT KNOWN (DDDS, 10 August 2000)
COMMUNICATIO-N-CHANNEL {JCAPS}	Child Comm Link NODE-ASSOCIATION Group Identifier	Chl_CL_NA_group_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NODE.	
COMMUNICATIO-N-CHANNEL {JCAPS}	Child COMMUNICATION N-CIRCUIT Identifier {JCAPS}	COMM_CRCT_id	Id(int)	int	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION-CIRCUIT.	Source: JCAPS 2.1 (COM_CRCT_ID).
COMMUNICATIO-N-CHANNEL {JCAPS}	COMMUNICATION N-CHANNEL Identifier {JCAPS}	COMM_CH_id	Id(int)	int	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION CHANNEL.	Source: JCAPS 2.1 (COM_CH_ID).
COMMUNICATIO-N-CHANNEL {JCAPS}	COMMUNICATION N-CHANNEL Number Identifier {JCAPS}	COMM_CH_nr_id	String	varchar(12)	NULL	No	No	THE IDENTIFIER THAT REPRESENTS THE NUMBER THAT DESIGNATES A PARTICULAR COMMUNICATION-CHANNEL IN A GROUP OF COMMUNICATION-CHANNELS.	Source: JCAPS 2.1 (COM_NUM).
COMMUNICATIO-N-CHANNEL {JCAPS}	Parent Comm Link NODE-ASSOCIATION Group Identifier	Par_CL_NA_group_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NODE.	
COMMUNICATIO-N-CIRCUIT {JCAPS}	COMMUNICATION N-CIRCUIT CCSD Identifier {JCAPS}	COMM_CRCT_CSD_id	string	char(8)	NULL	No	No	The eight-character alphanumeric code used to identify the COMMUNICATION-CIRCUIT throughout the joint communications network.	The Command Communications Service Designator is a 6-character identifier whose first character is the COMMUNICATION-CIRCUIT-TYPE CCSD Agency Code; second and third characters are the COMMUNICATION-CIRCUIT-TYPE CCSD Purpose Use Code; fourth character is the COMMUNICATION-CIRCUIT-TYPE CCSD Type Service Code; fifth character is the "from" (Source) NODE User Code; sixth character is the "to" (Destination) NODE User Code; and the seventh and eighth characters (termed the "sequential code") may contain any alphanumeric character other than the letter O or the letter I. Sources: CJCSM 6231.06 (14 Aug 95); JCAPS PM (Nov 99); and JCAPS 2.1 (CCSD).
COMMUNICATIO-N-CIRCUIT {JCAPS}	COMMUNICATION N-CIRCUIT Data Transfer Rate {JCAPS}	COMM_CRCT_data_tr_r	Number	float	NULL	No	No	THE RATE AT WHICH A COMMUNICATION-CIRCUIT CAN TRANSFER DATA. Source: JCAPS.	Source: JCAPS 2.1 (CC_DATA_TRNSF_RT).
COMMUNICATIO-N-CIRCUIT {JCAPS}	COMMUNICATION N-CIRCUIT Description Text {JCAPS}	COMM_CRCT_desc_tx	String	varchar(2000)	NULL	No	No	The text that briefly summarizes the character of the COMMUNICATION-CIRCUIT.	Source: JCAPS 2.1 (COM_CRCT_DSC_TX).
COMMUNICATIO-N-CIRCUIT {JCAPS}	COMMUNICATION N-CIRCUIT Identifier {JCAPS}	COMM_CRCT_id	Id(int)	int	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION-CIRCUIT.	Source: JCAPS 2.1 (COM_CRCT_ID).

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
COMMUNICATIO N-CIRCUIT {JCAPS}	COMMUNICATIO N-CIRCUIT Status Code {JCAPS}	COMM_ CRCT_st a_cd	Code_ smalli nt	smallint	NULL	No	No	THE CODE THAT REPRESENTS THE STATE OF A COMMUNICATION-CIRCUIT. Source: JCAPS.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (CC_STATUS_CODE).
COMMUNICATIO N-CIRCUIT {JCAPS}	COMMUNICATIO N-CIRCUIT-TYPE Code {JCAPS}	COMMCI RTY_cd	Code_ smalli nt	smallint	NULL	No	Yes	THE CODE THAT DENOTES A CLASS OF COMMUNICATION-CIRCUIT-TYPE.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (COM_CIR_TY_CD).
COMMUNICATIO N-CIRCUIT {JCAPS}	COMMUNICATIO N-CIRCUIT-TYPE Identifier {JCAPS}	COMMCI RTY_id	Id(int)	int	NULL	No	Yes	The Identifier of a specific COMMUNICATION- CIRCUIT-TYPE for a specific class.	Source: JCAPS 2.1 (COM_CIR_TY_ID).
COMMUNICATIO N-CIRCUIT {JCAPS}	Destination NODE Identifier	Des_NO DE_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NODE.	
COMMUNICATIO N-CIRCUIT {JCAPS}	Destination NODE-SYSTEM Identifier	Des_ND _SYS_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NODE-SYSTEM for a specific NODE and a specific SYSTEM.	
COMMUNICATIO N-CIRCUIT {JCAPS}	Destination SYSTEM Identifier	Des_SY S_id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
COMMUNICATIO N-CIRCUIT {JCAPS}	Source NODE Identifier	Src_NOD E_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NODE.	
COMMUNICATIO N-CIRCUIT {JCAPS}	Source NODE- SYSTEM Identifier	Src_ND_ SYS_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NODE-SYSTEM for a specific NODE and a specific SYSTEM.	
COMMUNICATIO N-CIRCUIT {JCAPS}	Source SYSTEM Identifier	Src_SYS _id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
COMMUNICATIO N-CIRCUIT-IER- ASSOCIATION {JCAPS}	COMMUNICATIO N-CIRCUIT Identifier {JCAPS}	COMM_ CRCT_id	Id(int)	int	NOT NULL	Yes	Yes	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION-CIRCUIT.	Source: JCAPS 2.1 (COM_CRCT_ID).
COMMUNICATIO N-CIRCUIT-IER- ASSOCIATION {JCAPS}	COMMUNICATIO N-CIRCUIT-IER- ASSOCIATION Identifier {JCAPS}	COMMCI RTIER_ asn_id	Id(int)	int	NOT NULL	Yes	No	The Identifier of a COMMUNICATION-CIRCUIT- IER-ASSOCIATION for a specific COMMUNICATION-CIRCUIT and a specific INFORMATION-EXCHANGE-REQUIREMENT.	Source: JCAPS 2.1 (CIRCUIT_IER_ASN_ID).
COMMUNICATIO N-CIRCUIT-IER- ASSOCIATION {JCAPS}	Info Exch Req GUIDANCE Identifier	InfoExcR eq_GUID _id	Id(int)	int	NOT NULL	Yes	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
COMMUNICATIO N-CIRCUIT-TYPE {JCAPS}	COMMUNICATIO N-CIRCUIT-TYPE Abbreviated Name {JCAPS}	COMMCI RTY_abb r_nm	String	varchar(2 50)	NULL	No	No	THE ABBREVIATED FORM OF THE NAME OF A COMMUNICATION-CIRCUIT-TYPE.	Source: JCAPS 2.1 (COM_CIR_ABB_NM).

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
COMMUNICATIO N-CIRCUIT-TYPE {JCAPS}	COMMUNICATIO N-CIRCUIT-TYPE CCSD Agency Code {JCAPS}	COMMCI RTY_CC SDA_cd	String	char(1)	NULL	No	No	The code, specified as part of the Command Communications Service Designator, that denotes the class of organization providing the service.	A = Department of State; B = Department of Navy or US Navy; C = Joint Staff; D = Defense Information System Agency; E = Joint Tactical Force Headquarters; F = NCS-Minor Operating Agencies, e.g., DOE; G = General Services Administration; H = Diplomatic Telecommunications System; I = Allied Governments; J = Department of the Air Force; K = Technical Research Institute, L = (FAA) Federal Aviation Administration; M = (NASA) National Aeronautics and Space Administration; N = (DOD) DOD Agencies not listed; O = (FORGN) Host Country; P = (NCS) Other US Departments; Q = (FEMA) Federal Emergency Management Agency; R = USCINCPAC; S = OSD; T = (FORGN) Treaty Organization; U = Army or US Army; V = USCINCENT; W = USCINACOM; X = (DOC) Department of Commerce; Y = Joint Special Operations Task Forces HQ (JSOTF); Z = MARFOR; 1 = ARSOF; 2 = AFSOF; 3 = NAVSOF; 4 = Tactical Support Command, i.e., COSCOM; 5 = (TCA) TELRAN Communications Analysis; 6 = CDRFORSCOM; 7 = USCINCSOC; 8 = USCINCSO; 9 = USCINCEUR; 0 = Spare (CINC assigned). Sources: CJCSM 6231.06 (14 Aug 95); JCAPS PM (Aug 00); and JCAPS 2.1 (CCSD AGENCY CODE).
COMMUNICATIO N-CIRCUIT-TYPE {JCAPS}	COMMUNICATIO N-CIRCUIT-TYPE CCSD Purpose Use Code {JCAPS}	COMMCI RTY_CC SDP_cd	String	char(2)	NULL	No	No	The code, specified as part of the Command Communications Service Designator, that denotes the purpose for the service provided.	AK = Air Force Remote Computer Circuits; B1 = Track Supervision Net; B2 = Interface Coordination Net; B3 = Data Coordination Net; B4 = Voice Product Net; CA = TAC Air Defense Network; C6 = Computer-Assisted Force Management System; CM = Communications Management; EA = Air Force Security Service; EU = USEUCOM-EMC USEUCOM Contingency Circuits; EX = Exercise Circuits (For temporary circuits only); F1 = Intercenter Air Traffic Movement and Control - Overseas; F2 = Air Traffic Movement and Control Interceptor Radar Handoff; F3 = Air Traffic Movement and Control Intra-Area Nonradar; F4 = Air Traffic Movement and Control Intra-Area Radar Handoff; F5 = Air Traffic Movement and Control Tower to Tower; F7 = Air Traffic Movement and Control Intercenter Nonradar; G2 = Weather Message System Center High-Speed Data Circuits; G5 = Service from WMSC to Military Station of Weather Info; G7 = Service Collect and Disseminate Nonaviation Weather Info; HE = USCENAF Command and Control Communications; JF = Defense Meteorological Satellite Program; JN = Joint Interface Test Force--Joint Interoperability Tech CMD/Ctrl System; J1 = Local Teletype Circuits; J6 = National Weather Service Radar FAX; KA = Intelligence; KK = Army Command and Control Network; KL = Keying Lines; KN = NEACP Teletypewriter Network; KW = NCA/CJCS Minimum Essential Emergency Communications Network; KX = NMCC Teletypewriter Network; KZ = NMCS Data Transmission; K6 = Miscellaneous Remote Facility Circuits; LL = Long Local Subscriber; LP = US DSN Loop-Around Trunks; MC = US Marine Corps; MV = US Military Assistance Network; NB = USCENCOM Command and Control Circuits; NG = National Guard--Training; OL = Link Orderwire; OM = Telemetry Orderwire; ON = Non-DCS

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
								Orderwire; OO = System Orderwire; OR = Teletype Orderwire; PA = AF Command Post Voice Network; PB = AF Alternate Command Network; PC = AF Command Network; PH = Army, Air Force, Navy Network; QD = Weather Activities-- Miscellaneous; QE = Weather Teletype (Civil FAA,C,O); QG = Weather Teletype; QI = Weather FAX (Civil, US Weather Bureau); QJ = Weather FAX; QK = Lazer FAX Weather (LAZERFAX); QL = Tactical Imagery Dissemination System (TIDS); QT = Tactical Analog Interswitch Trunk (TASIT) 1/Non-DCS; QU = Tactical Digital Interswitch Trunk (TDIST) 1/Non-DCS; QV = Tactical Weather Switch Interswitch Trunk (TMIST) 1/Non-DCS; RF = PACAF Command and Control Network; RN = Foreign Circuits Between US Components; RO = Foreign Circuits Between Non-US Components; RR = Foreign Circuits Between Non-US Components and US Components; ST = STU III Intercountry Connectivity; S3 = Intelligence and Security Automated Network; TA = TAC Operations Support TTY Network; TB = TAC Command and Control Voice Alerting System; TC = TAC Operations Support Voice System Network; TD = TAC Remote Computer Circuits; TE = Army, AF, Navy Temp (See DCAC 310-65-1, Chapter 14); TF = Department of State; TJ = CRITICOM Red TDM Package System; TK = CRITICOM Black TDM Package System; TM = DCS AN/FCC-100 Pkg Sys (DTN Only) (Code for Other FCC-100 Trunks); TN = DCS Time Division Multiplex Package System; TO = Telenet/Orderwire Package System Trunk; TP = Speech Plus System; TQ = Frequency Subdivided Multiple Modem System (Digital); TW = Voice Channel Package system; TX = VFCT System; T2 = Non-DCS AN/FCC-100 Pkg System (For Use with Type Service M); T4 = Non-DCS TDM Pkg System (For Use with Type Service Code "M" / "X"); T5 = Non-DCS Statistical TDM Pkg System (Use with Type Svc Code "M"); T6 = Tactical Digital Information Link (TADIL); T7 = Tactical Voice Information Link (VOX TELL); UA = Common-User Teletypewriter Service; UB = Common-User Voice Service; UC = Trunk Circuit Between Voice Concentrator System Equipment; UD = DCS Secure Voice Communications Network; UE = Common-User Digital Data; UF = Common-user FAX (Other than weather); UG = Electronic Blackboard Communications; UJ = DDN Dial-up Service (DCO to TAC); UK = DDN Gateway Access Line; UL = DCS Automatic Record Communications Network Circuits; UM = Special Purpose Network (See DCAC 310-65-1 Chap 14); UN = DDN IMP to IMP Interswitch Trunk Circuit; UO = AF Air Operations Network; UD = TAC to IMP DDN Access Line; UR = Nonsecure Network Ckts (e.g., STU-III) Which are Part of the DCS; US = DSN Nontandem IST FM DSN END OFC	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
COMMUNICATIO N-CIRCUIT-TYPE (JCAPS)	COMMUNICATIO N-CIRCUIT-TYPE CCSD Type Service Code {JCAPS}	COMMCI RTY_CC SDT_cd	String	char(1)	NULL	No	No	Switch to DSN Remote Switch; UT = DSN ISW Line FM DSM Node SW to Non-DCS (SVC/AGCY) SW; UU = DSN IST Ckt connecting DSN Node Switches; UV = DSN Nontandem IST FM DSN END OFC Switch to DSN End Ofc Switch; UW = Interdepartmental Dial Telephone Network; UX = Non-Tandem IST DSN Node/Switch to DSN End Ofc/Remote SW; UY = DSN Dial Subscriber; UZ = Tandem Switch Intersite Trunk Circuit; VC = Trunk Circuit Between Voice Concentrator System Equipment; VQ = Mystic Star Network (JACC/CP); WC = WWMCCS (WIN) Intercomputer Circuit (Approved by Joint Staff/J2); WD = WWMCCS (WIN) Access Line (Approved by Joint Staff/J2-32); WE = Comm SVC Not Associated with Circuit Lease (See DCAC 310-65-1); WF = WASHFAX High-Speed Digital Facsimile; WG = WWMCCS (WIN) Combination Access Line (Approved by Joint Staff/J-32); WJ = WWMCCS Access Line (Approved by Joint Staff/J-32); WK = IDHS Access Line (approved by Joint Staff/K-32); WX = Navy Weather; XD = NWS Digital Facsimile Network (DIFAX); XQ = GOES, Telephone Facsimile System (GOESFAX); XZ = NWS Miscellaneous Weather Communications System; YA = Fleet Ship-Shore Access; YB = Alaska Command and Control; YC = USACOM Command and Control Network; YD = USSOUTHCOM command and Control Network; ZE = Satellite Control/Reporting Communications; ZB = Tactical Command and Control; ZD = Search and Rescue; ZH = Army Air Defense Command Intersite Communications; ZK = Ground Forces Air Support Network; ZM = Military Air Traffic Control and Flight Facilities network; ZN = Intelligence Collection/Dissemination Network; ZS = Air Traffic Control/Flight Facilities; ZX = DSN Access Line Equip for Delivery or Record Traffic thru to DIN. Sources: CJCSM 6231.06 (14 Aug 95); JCAPS PM (Aug 00); and JCAPS 2.1 (CCSD_PUR_USE_CODE).	Switch to DSN Remote Switch; UT = DSN ISW Line FM DSM Node SW to Non-DCS (SVC/AGCY) SW; UU = DSN IST Ckt connecting DSN Node Switches; UV = DSN Nontandem IST FM DSN END OFC Switch to DSN End Ofc Switch; UW = Interdepartmental Dial Telephone Network; UX = Non-Tandem IST DSN Node/Switch to DSN End Ofc/Remote SW; UY = DSN Dial Subscriber; UZ = Tandem Switch Intersite Trunk Circuit; VC = Trunk Circuit Between Voice Concentrator System Equipment; VQ = Mystic Star Network (JACC/CP); WC = WWMCCS (WIN) Intercomputer Circuit (Approved by Joint Staff/J2); WD = WWMCCS (WIN) Access Line (Approved by Joint Staff/J2-32); WE = Comm SVC Not Associated with Circuit Lease (See DCAC 310-65-1); WF = WASHFAX High-Speed Digital Facsimile; WG = WWMCCS (WIN) Combination Access Line (Approved by Joint Staff/J-32); WJ = WWMCCS Access Line (Approved by Joint Staff/J-32); WK = IDHS Access Line (approved by Joint Staff/K-32); WX = Navy Weather; XD = NWS Digital Facsimile Network (DIFAX); XQ = GOES, Telephone Facsimile System (GOESFAX); XZ = NWS Miscellaneous Weather Communications System; YA = Fleet Ship-Shore Access; YB = Alaska Command and Control; YC = USACOM Command and Control Network; YD = USSOUTHCOM command and Control Network; ZE = Satellite Control/Reporting Communications; ZB = Tactical Command and Control; ZD = Search and Rescue; ZH = Army Air Defense Command Intersite Communications; ZK = Ground Forces Air Support Network; ZM = Military Air Traffic Control and Flight Facilities network; ZN = Intelligence Collection/Dissemination Network; ZS = Air Traffic Control/Flight Facilities; ZX = DSN Access Line Equip for Delivery or Record Traffic thru to DIN. Sources: CJCSM 6231.06 (14 Aug 95); JCAPS PM (Aug 00); and JCAPS 2.1 (CCSD_PUR_USE_CODE).
								The code, specified as part of the Command Communications Service Designator, that denotes the kind of service provided.	A = Teletype Service Other Than DCS Switched Networks; B = DSN Access Line; C = DSN Interswitch Trunk; D = Data Other Than DCS Switched Networks; E = AUTODIN Access Line (See L, Q, and 7); F = AUTODIN Interswitch Trunk; J = Facsimile or Telephoto Other Than DCS Switched Networks; K = Continuous Wave; L = DSSCS AUTODIN Access Line; M = Package System. No Channel Accounting by DISA; N = TBD; P = Interswitch Trunk/Circuit for Switched Networks Other Than DSN or AUTODIN; Q = AUTODIN Interchange Circuits, Circuits Between AUTODIN and Other Switched Networks, except DSN; R = Alternate Voice/Record Other Than DCS Switched Networks; S = Video; T = Telemetry Other Than DCS Switched Networks; U = European Telephone System Access Line; V = Voice Other Than DCS

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Entity Name	Attribute Name	Col. Name	Domain	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
COMMUNICATIO N-CIRCUIT-TYPE {JCAPS}	COMMUNICATIO N-CIRCUIT-TYPE Code {JCAPS}	COMMCI RTY_cd	Code_ smalli nt	smallint	NOT NULL	Yes	No	Switched Networks; W = European Telephone System Interswitch Trunk; X = Package System, Channel Accounting by DISA; Y = Signaling, dc, or Audio, Other Than DCS Switched Networks; Z = Non-DCS Intersite Trunk Circuit; 1 = Automatic Message Processing System; 2 = AMPS Trunk between AMPS Switches; 3 = FTS Access Line; 4 = FTS Interswitch Trunk; 7 = Indirect AUTODIN Access through an Intermediate Relay; 8 = DDN Interswitch Trunk Circuit; 9 = DDN Access Line. Sources: CJCSM 6231.06 (14 Aug 95); JCAPS PM (Aug 00); and JCAPS 2.1 (CCSD_TYS_CODE).	Domain is TBD from JCAPS. Source: JCAPS 2.1 (COM_CIR_TY_CD).
COMMUNICATIO N-CIRCUIT-TYPE {JCAPS}	COMMUNICATIO N-CIRCUIT-TYPE Data Rate {JCAPS}	COMMCI RTY_dat a_rt	Numb er	float	NULL	No	No	The data rate of a specific COMMUNICATION- CIRCUIT-TYPE.	Source: JCAPS 2.1 (COM_CIR_TY_RT).
COMMUNICATIO N-CIRCUIT-TYPE {JCAPS}	COMMUNICATIO N-CIRCUIT-TYPE Description Text {JCAPS}	COMMCI RTY_des cr_tx	String	varchar(2 000)	NULL	No	No	THE TEXT THAT DESCRIBES A COMMUNICATION-CIRCUIT-TYPE.	Source: JCAPS 2.1 (COM_CIR_D_TXT).
COMMUNICATIO N-CIRCUIT-TYPE {JCAPS}	COMMUNICATIO N-CIRCUIT-TYPE Identifier {JCAPS}	COMMCI RTY_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a specific COMMUNICATION- CIRCUIT-TYPE for a specific class.	Source: JCAPS 2.1 (COM_CIR_TY_ID).
COMMUNICATIO N-CIRCUIT-TYPE {JCAPS}	COMMUNICATIO N-CIRCUIT-TYPE Name {JCAPS}	COMMCI RTY_nm	String	varchar(2 50)	NULL	No	No	THE NAME OF A COMMUNICATION-CIRCUIT- TYPE.	Source: JCAPS 2.1 (COM_CIR_TY_NM).
COMMUNICATIO N-CIRCUIT-TYPE {JCAPS}	Destination SYSTEM Identifier	Des_SY S_id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
COMMUNICATIO N-CIRCUIT-TYPE {JCAPS}	Source SYSTEM Identifier	Src_SYS _id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
COMMUNICATIO N-LINK	Comm Link NODE- ASSOCIATION Group Identifier	CL_NA_ group_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
COMMUNICATIO N-LINK	COMMUNICATIO N-LINK Alternate Identifier {JCAPS}	COMM_L NK_att_i d	String	varchar(5 0)	NULL	No	No	THE IDENTIFIER THAT ALTERNATIVELY REPRESENTS A COMMUNICATION-LINK.	Source: JCAPS 2.1 (COM_LNK_ID).
COMMUNICATIO N-LINK	COMMUNICATIO N-LINK Channel Quantity {JCAPS}	COMM_L NK_chnl _qty	Numb er	float	NULL	No	No	THE NUMBER OF COMMUNICATION CHANNELS THAT CAN OPERATE ON A COMMUNICATION-LINK.	Source: JCAPS 2.1 (COM_LNK_CHN_QY).
COMMUNICATIO N-LINK	COMMUNICATIO N-LINK COMSEC Text	COMM_L NK_COM SEC_tx	String	varchar(1 50)	NULL	No	No	List of all communications security devices used on this connection.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
COMMUNICATIO N-LINK	COMMUNICATIO N-LINK Description Text {JCAPS}	COMM_L NK_desc r_tx	String	varchar(2 000)	NULL	No	No	THE TEXT THAT DESCRIBES A COMMUNICATION-LINK.	Source: JCAPS 2.1 (COMM_LNK_DSC_TX).
COMMUNICATIO N-LINK	COMMUNICATIO N-LINK Group Data Transfer Rate {JCAPS}	COMM_L NK_grp_t r_rt	Numb er	float	NULL	No	No	THE RATE AT WHICH DATA CAN BE TRANSFERRED ON A COMMUNICATION-LINK WHEN ALL CHANNELS ON THE COMMUNICATION-LINK ARE USED.	Source: JCAPS 2.1 (CLG_DATA_TRNSF_RT).
COMMUNICATIO N-LINK	COMMUNICATIO N-LINK Latency Time	COMM_L NK_lat_t m	String	varchar(1 4)	NULL	No	No	Average latency time on this connection during peak operations.	Unit is seconds.
COMMUNICATIO N-LINK	COMMUNICATIO N-LINK Limitations Description Text	COMM_L NK_lim_ ds_tx	String	varchar(1 50)	NULL	No	No	The text that characterizes restrictions for a COMMUNICATION-LINK.	
COMMUNICATIO N-LINK	COMMUNICATIO N-LINK Special Features Description Text	COMM_L NK_sp_f e_tx	String	varchar(1 50)	NULL	No	No	Description of any special features of this connection (i.e., anti-jam capability).	
COMMUNICATIO N-LINK	COMMUNICATIO N-LINK System Link Designator Identifier {JCAPS}	COMM_L NK_SLD _id	String	char(8)	NULL	No	No	The identifier that contains the System Link Designator (SLD) assigned to a specific COMMUNICATION- LINK. The System Link Designator is a 6-character identifier whose first character is from a list of System/Link types; the second character is the "from" NODE User Code; the third character is the "to" NODE User Code, the fourth and fifth characters are the number (01-99) of trunk groups or system number; and the sixth through eighth characters are the number (001-999) of channels per group or system. The System/Link types are the following: S = SHF Satellite; B = C Band Satellite; K = Ku Band Satellite; A = UHF Satellite; T = TROPO; M = Microwave (UHF/SHF); H = High Frequency (HF) Radio; L = Low Frequency (LF) Radio; U = UHF Radio; V = VHF Radio; C = Cable (26 pair); P = Cable (COAX); O = Cable (Fiber Optic); Z = Cable (Other); W = Cascaded. Sources: CJCSM 6231.06 (14 Aug 95); JCAPS PM (Nov 99); and JCAPS 2.1 (SLD).	
COMMUNICATIO N-LINK	COMMUNICATIO N-LINK Throughput Rate	COMM_L NK_thrup t_rt	Numb er	float(14)	NULL	No	No	Useable bandwidth for the COMMUNICATION- LINK.	Unit is bits per second.
COMMUNICATIO N-LINK	COMMUNICATIO N-LINK-TYPE Identifier {JCAPS}	COMM_L NK_TY_j d	Id(int)	int	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION LINK TYPE	Source: JCAPS 2.1 (COMM_LNK_TY_ID).
COMMUNICATIO N-LINK	COMMUNICATIO N-LINK Destination NODE Identifier	Des_NO DE_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NODE.	
COMMUNICATIO N-LINK	COMMUNICATIO N-LINK Destination NODE-SYSTEM Identifier	Des_NO _SYS_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NODE-SYSTEM for a specific NODE and a specific SYSTEM.	
COMMUNICATIO N-LINK	COMMUNICATIO N-LINK Destination SYSTEM Identifier	Des_SY S_id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
COMMUNICATIO N-LINK	COMMUNICATIO N-LINK Source NODE Identifier	Src_NOD E_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NODE.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
COMMUNICATIO N-LINK	Source NODE- SYSTEM Identifier	Src_ND_ SYS_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NODE-SYSTEM for a specific NODE and a specific SYSTEM.	
COMMUNICATIO N-LINK	Source SYSTEM Identifier	Src_SYS_ id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
COMMUNICATIO N-LINK-IER- ASSOCIATION {JCAPS}	Comm Link NODE- ASSOCIATION Group Identifier	CL_NA_ group_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
COMMUNICATIO N-LINK-IER- ASSOCIATION {JCAPS}	COMMUNICATIO N-LINK-IER- ASSOCIATION Identifier {JCAPS}	CL_IER_ assoc_id	Id(int)	int	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS THE RELATIONSHIP BETWEEN A COMMUNICATION LINK AND AN INFORMATION EXCHANGE REQUIREMENT.	Source: JCAPS 2.1 (LINK_IER_ASN_ID).
COMMUNICATIO N-LINK-IER- ASSOCIATION {JCAPS}	Info Exch Req GUIDANCE Identifier	InfoExchR eq_GUID _id	Id(int)	int	NOT NULL	Yes	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
COMMUNICATIO N-LINK-TYPE {JCAPS}	COMMUNICATIO N-LINK-TYPE Channel Quantity {JCAPS}	COMM_L NK_TY_c hn_qty	Numb er	float	NULL	No	No	THE NUMBER OF CHANNELS ON THE COMMUNICATION LINK TYPE	Source: JCAPS 2.1 (COMM_LNK_TY_NBR_CH).
COMMUNICATIO N-LINK-TYPE {JCAPS}	COMMUNICATIO N-LINK-TYPE Code {JCAPS}	COMM_L NK_TY_c d	Code_ small int	smallint	NULL	No	No	THE CODE GIVEN TO THE COMMUNICATION LINK	1 = SHF Satellite (S); 2 = C Band Satellite (B); 3 = Ku Band Satellite (K); 4 = UHF Satellite (A); 5 = TROPO (T); 6 = Microwave (UHF/SHF) (M); 7 = High Frequency (HF) Radio (H); 8 = Low Frequency (L) Radio; 9 = UHF Radio (U); 10 = VHF Radio (V); 11 = Cable (26 pair) (C); 12 = Cable (COAX) (P); 13 = Cable (Fiber Optic) (O); 14 = Cable (Other) (Z); 15 = Cascaded (W). Sources: CJCSM 6231.06 (14 Aug 95); and JCAPS IDD for JCAPS 2.1 (COMM_LNK_TY_CD).
COMMUNICATIO N-LINK-TYPE {JCAPS}	COMMUNICATIO N-LINK-TYPE Data Rate {JCAPS}	COMM_L NK_TY_ dat_rt	Numb er, Real	float	NULL	No	No	THE DATA RATE OF THE COMMUNICATION LINK	Unit is bits per second. Source: JCAPS 2.1 (COMM_LNK_TY_RATE).
COMMUNICATIO N-LINK-TYPE {JCAPS}	COMMUNICATIO N-LINK-TYPE Description Text {JCAPS}	COMM_L NK_TY_ desc_tx	String	varchar(2 000)	NULL	No	No	TEXT DESCRIBING THE COMMUNICATION LINK TYPE	Source: JCAPS 2.1 (COMM_LNK_TY_D_TXT).
COMMUNICATIO N-LINK-TYPE {JCAPS}	COMMUNICATIO N-LINK-TYPE Identifier {JCAPS}	COMM_L NK_TY_ id	Id(int)	int	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION LINK TYPE	Source: JCAPS 2.1 (COMM_LNK_TY_ID).
COMMUNICATIO N-LINK-TYPE {JCAPS}	COMMUNICATIO N-LINK-TYPE Name {JCAPS}	COMM_L NK_TY_ nm	String	varchar(2 50)	NULL	No	No	THE NAME OF THE COMMUNICATION LINK	Source: JCAPS 2.1 (COMM_LNK_TY_NAME).
COMMUNICATIO N-LINK-TYPE {JCAPS}	Destination SYSTEM Identifier	Des_SY S_id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
COMMUNICATIO N-LINK-TYPE (JCAPS)	Source SYSTEM Identifier	Src_SYS_id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
COMMUNICATIO N-MEDIUM	COMMUNICATIO N-MEDIUM Abbreviated Name (JCAPS)	COMM_ MED_ab br_nm	Name	varchar(50)	NULL	No	No	A SHORTENED FORM OF THE NAME OF A COMMUNICATION-MEDIUM. Source: JCAPS 2.1 (COM_MED_ABBR_NM).	
COMMUNICATIO N-MEDIUM	COMMUNICATIO N-MEDIUM Category Code	COMM_ MED_cat _cd	String	varchar(2)	NULL	No	No	LL--Land Line (not otherwise specified); PM--Physical medium (e.g., disk); RA--Radio; SA--Satellite; DB--Shared database; TF--Terrestrial (fiber); TW--Terrestrial (wire); MA--Manual; OT--Other; N--Not specified; X--Not known.	
COMMUNICATIO N-MEDIUM	COMMUNICATIO N-MEDIUM Identifier	COMM_ MED_id	Id(int)	int	NOT NULL	Yes	No	The code that represents a class of COMMUNICATION-MEDIUM. The unique identifier of a specific COMMUNICATION-MEDIUM.	
COMMUNICATIO N-MEDIUM	COMMUNICATIO N-MEDIUM Name	COMM_ MED_nm	Name	varchar(50)	NULL	No	No	The name of a specific COMMUNICATION-MEDIUM.	
COMMUNICATIO N-SYSTEM	Communication- Electronic- Material-Type Name (Del)	CS_alt_nm	String	varchar(40)	NULL	No	No	C4RDP, Communication-Electronic-Material-Type Name--The name, expressed in a word or words, of the Communication Electronic Material Type.	
COMMUNICATIO N-SYSTEM	COMMUNICATIO N-SYSTEM Security- Classification Code	CS_rec_ secl_cd	Security- Classi- fication	char(1)	NULL	No	No	U = Unclassified, C = Confidential; S = Secret. Source: C4RDP, Communication-Electronic-Material-Type Security-Classification Code--The code that denotes the security classification of the metadata describing the Communication-Electronic-Material-Type.	
COMMUNICATIO N-SYSTEM	COMMUNICATIO N-SYSTEM Type Code	CS_ty_cd	Code_ smallint	smallint	NULL	No	No	00 = NONE; 01 = ACUS-FIXED PHONE; 02 = ACUS-MOBILE PHONE; 03 = LAN-PACKET SWITCH 802.3 PORT; 04 = AUTODIN/DMS; 05 = LOCAL AREA NETWORK (LAN) STAND ALONE; 06 = ACUS-PACKET SWITCH X.25; 07 = UHF SINGLE CHANNEL TACSAT; 08 = HF MULTICHANNEL RADIO; 09 = SHF SINGLE CHANNEL TACSAT; 10 = EHF SINGLE CHANNEL TACSAT; 11 = HF SINGLE CHANNEL RADIO; 12 = VHF/FM SINGLE CHANNEL RADIO; 13 = TACTICAL INTERNET - DATA; 14 = VHF/AM SINGLE CHANNEL RADIO; 15 = UHF/FM SINGLE CHANNEL RADIO; 16 = UHF/AM SINGLE CHANNEL RADIO; 17 = UHF MULTICHANNEL RADIO; 18 = GROUND POSITIONING SYSTEM; 19 = ASYNCHRONOUS TRANSFER MODE; 20 = ENHANCED POSITION LOCATION REPORTING SYS; 30 = JOINT TACTICAL INFO DISTRIBUTION SYS; 31 = JOINT TACTICAL RADIO; 36 = COMMANDERS TACTICAL TERMINAL; 37 = DEFENSE DATA NETWORK; 40 = MAGNETIC/OTHER DIGITAL MEDIA; 50 = PRINTOUTS/MICROFICHE-NON DIGIT; 60 = SECURE INTERNET PROTOCOL ROUTER NETWORK; 61 = NON-SECURE INTERNET PROTOCOL ROUTER NET; 70 = TO BE DETERMINED. Source: C4RDP, Communication-Electronic-Material-Type Code--The code that represents the specific value of a communications equipment used to transmit information over an interface.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
COMMUNICATIO N-SYSTEM	SYSTEM Identifier	SYS_id	Id(int)	int	NOT NULL	Yes	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
COMMUNICATIO N-SYSTEM- TRANSMISSION {ASA, C4RDP-- CELIN}	Communication System SYSTEM Identifier	SYS_id	Id(int)	int	NOT NULL	Yes	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
COMMUNICATIO N-SYSTEM- TRANSMISSION {ASA, C4RDP-- CELIN}	COMMUNICATIO N-SYSTEM- TRANSMISSION Record Security Classification Code	CS_TRN S_rsec_ cd	Securi- ty- Classi- ficatio n	char(1)	NULL	No	No	The code that denotes the security classification of the metadata describing the COMMUNICATION-SYSTEM-TRANSMISSION.	U = Unclassified, C = Confidential; S = Secret. Source: C4RDP, Communication-Electronic-Materiel-Line-Item-Instance Security-Classification Code--The code that denotes the security classification of the metadata describing the Communication-Electronic-Materiel-Line-Item-Instance.
COMMUNICATIO N-SYSTEM- TRANSMISSION {ASA, C4RDP-- CELIN}	MATERIEL-ITEM IDENTIFIER	MATL_id	Id(int)	int	NOT NULL	Yes	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	
COUNTRY	COUNTRY ABBREVIATED NAME	CNTRY_abbrev_n m	String	varchar(5)	NULL	No	No	(14374) (A) THE ABBREVIATED FORM OF A COUNTRY NAME.	
COUNTRY	COUNTRY CODE	CNTRY_cd	String	char(2)	NOT NULL	Yes	No	(14392) (A) THE CODE THAT REPRESENTS A COUNTRY.	AA = ARUBA. (ATCCIS uses domain value "AB"); AC = ANTIGUA AND BARBUDA; AE = UNITED ARAB EMIRATES (ATCCIS uses domain value "TC"); AF = AFGHANISTAN; AG = ALGERIA; AJ = AZERBAIJAN. (ATCCIS uses domain value "AZ"); AL = ALBANIA; AM = ARMENIA; AN = ANDORRA; AO = ANGOLA; AQ = AMERICAN SAMOA; AR = ARGENTINA; AS = AUSTRALIA; AT = ASHMORE AND CARTIER ISLANDS; AU = AUSTRIA; AV = ANGUILLA; AY = ANTARCTICA; BA = BAHRAIN; BB = BARBADOS; BC = BOTSWANA; BD = BERMUDA; BE = BELGIUM; BF = BAHAMAS, THE (in ATCCIS, "Bahamas"); BG = BANGLADESH; BH = BELIZE; BI = Blue (from ATCCIS); BJ = Bradyland (from ATCCIS); BK = BOSNIA AND HERZEGOVINA (in ATCCIS, "BK" represents "Beylarus", "BZ" represents "Bosnia" and "HZ" represents "Herzegovina"); BL = BOLIVIA; BM = BURMA; BN = BENIN; BO = BELARUS (ATCCIS uses domain value "BK"); BP = SOLOMON ISLANDS; BQ = NAVASSA ISLAND; BR = BRAZIL; BS = BASSAS DA INDIA; BT = BHUTAN; BU = BULGARIA; BV = BOUVET ISLAND; BX = BRUNEI; BY = BURUNDI; CA = CANADA; CB = CAMBODIA; CD = CHAD; CE = SRI LANKA; CF = CONGO; CG = CONGO (DEMOCRATIC REPUBLIC OF THE) (in ATCCIS, "Zaire"); CH = CHINA; CI = CHILE; CJ = CAYMAN ISLANDS; CK = COCOS (KEELING) ISLANDS; CM = CAMEROON; CN = COMOROS; CO = COLOMBIA; CQ = NORTHERN MARIANA ISLANDS; CR = CORAL SEA ISLANDS; CS = COSTA RICA; CT = CENTRAL AFRICAN REPUBLIC; CU = CUBA; CV = CAPE VERDE; CW = COOK ISLANDS; CY = CYPRUS; DA = DENMARK; DJ = DJIBOUTI; DO = DOMINICA; DQ = JARVIS ISLAND; DR = DOMINICAN REPUBLIC; EA = Eatwatj (from ATCCIS); EC = ECUADOR; EG = EGYPT; EI = IRELAND; EK = EQUATORIAL GUINEA; EN = ESTONIA; ER = ERITREA (Not found in ATCCIS); ES

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
								= EL SALVADOR; ET = ETHIOPIA; EU = EUROPA ISLAND; EZ = CZECH REPUBLIC (ATCCIS uses domain value "CP"); FG = FRENCH GUIANA; FI = FINLAND; FJ = FIJI; FK = FALKLAND ISLANDS (ISLAS MALVINAS) (ATCCIS uses domain value "FA"); FM = FEDERATED STATES OF MICRONESIA; FO = FAROE ISLANDS; FP = FRENCH POLYNESIA; FQ = BAKER ISLAND; FR = FRANCE; FS = FRENCH SOUTHERN AND ANTARCTIC LANDS; GA = GAMBIA, THE (in ATCCIS, "Gambia"); GB = GABON; GD = Gold (from ATCCIS); GG = GEORGIA; GH = GHANA; GI = GIBRALTAR; GJ = GRENADA; GK = GUERNSEY; GL = GREENLAND; GM = GERMANY (ATCCIS uses domain value "CP"); GO = GLORIOSO ISLANDS; GP = GUADELOUPE; GQ = GUAM; GR = GREECE; GT = GUATEMALA (in ATCCIS, "Guatemala"); GV = GUINEA; GX = Genericland (from ATCCIS); GY = GUYANA; GZ = GAZA STRIP; HA = HAITI; HK = HONG KONG; HM = HEARD ISLAND AND McDONALD ISLANDS; HO = HONDURAS; HQ = HOWLAND ISLAND; HR = CROATIA (ATCCIS uses domain value "CX" for "Croatia (Hrvatska)"); HU = HUNGARY; IC = ICELAND; ID = INDONESIA; IM = IMAN, ISLE OF (in ATCCIS, "Man"); IN = INDIA; IO = BRITISH INDIAN OCEAN TERRITORY; IP = CLIPPERTON ISLAND; IR = IRAN; IS = ISRAEL; IT = ITALY; IV = COTE D'IVOIRE (in ATCCIS, "Ivory Coast"); IY = Iraq-Saudi Arabia Neutral Zone (from ATCCIS); IZ = IRAQ; JA = JAPAN; JE = JERSEY; JM = JAMAICA; JN = JAN MAYEN; JO = JORDAN; JQ = JOHNSTON ATOLL; JU = JUAN DE NOVA ISLAND; KE = KENYA; KG = KYRGYZSTAN (ATCCIS uses domain value "KY"); KN = KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF (in ATCCIS, "Korea"); KQ = KINGMAN REEF; KR = KIRIBATI; KS = KOREA, REPUBLIC OF (in ATCCIS, "Korea"); KT = CHRISTMAS ISLAND; KU = KUWAIT; KZ = KAZAKHSTAN; LA = LAOS; LE = LEBANON; LG = LATVIA (ATCCIS uses domain value "LV"); LH = LITHUANIA; LI = LIBERIA; LO = SLOVAKIA (Not in ATCCIS); LQ = PALMYRA ATOLL; LS = LIECHTENSTEIN; LT = LESOTHO; LU = LUXEMBOURG; LY = LIBYA; MA = MADAGASCAR; MB = MARTINIQUE (in ATCCIS, "Martinus"); MC = MACAU; MD = MOLDOVA (in ATCCIS, "Moldavia"); MF = MAYOTTE; MG = MONGOLIA; MH = MONTERRAT; MI = MALAWI; MK = MACEDONIA (ATCCIS uses domain value "ME"); ML = MALI; MM = Multinational (from ATCCIS); MN = MONACO; MO = MOROCCO; MP = MAURITIUS; MQ = MIDWAY ISLANDS; MR = MAURITANIA; MT = MALTA; MU = OMAN; MV = MALDIVES; MW = MONTENEGRO (Not in ATCCIS); MX = MEXICO; MY = MALAYSIA; MZ = MOZAMBIQUE; NC = NEW CALEDONIA; NE = NIUE; NF = NORFOLK ISLAND; NG = NIGER; NH = VANUATU; NI = NIGERIA; NL = NETHERLANDS; NO = NORWAY; ; NP = NEPAL; NQ = Trust Territory of the Pacific Islands (from ATCCIS); NR = NAURU; NS = SURINAME; NT = NETHERLANDS ANTILLES (ATCCIS uses domain value "NA", "NT" in ATCCIS is "NATO"); NU = NICARAGUA; NZ = NEW ZEALAND; OR = Orange (from ATCCIS); PA = PARAGUAY; PC = PITCAIRN ISLANDS; PE = PERU; PF = PARACEL ISLANDS; PG = SPRATLY ISLANDS; PK = PAKISTAN; PL = POLAND; PM = PANAMA; PO = PORTUGAL; PP = PAPUA NEW GUINEA; PS = PALAU; PU = GUINEA-BISSAU; QA = QATAR; RE = REUNION; RM = MARSHALL ISLANDS (Not in ATCCIS); RO = ROMANIA; RP = PHILIPPINES; RO = PUERTO RICO; RS = RUSSIA; RW = RWANDA; SA = SAUDI ARABIA; SB = ST. PIERRE AND MIQUELON; SC = ST.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note	
									KITTS AND NEVIS (In ATCCIS, "St. Christopher and Nevis"); SE = SEYCHELLES; SF = SOUTH AFRICA; SG = SENEGAL; SH = ST. HELENA; SI = SLOVENIA; SL = SIERRA LEONE; SM = SAN MARINO; SN = SINGAPORE; SO = SOMALIA; SP = SPAIN; SR = SERBIA (In ATCCIS, "Slovak Republic"); ST = ST. LUCIA; SU = SUDAN; SV = SVALBARD; SW = SWEDEN; SX = SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS (Not in ATCCIS); SY = SYRIA; SZ = SWITZERLAND; TD = TRINIDAD AND TOBAGO; TE = TROMELIN ISLAND; TH = THAILAND; TI = TAJIKISTAN; TK = TURKS AND CAICOS ISLANDS; TL = TOKELAU; TN = TONGA; TO = TOGO; TP = SAO TOME AND PRINCEPE; TS = TUNISIA; TU = TURKEY; TV = TUVALU; TW = TAIWAN; TX = TURKMENISTAN; TZ = TANZANIA; UG = UGANDA; UK = UNITED KINGDOM; UP = UKRAINE (ATCCIS uses domain value "UA"); US = UNITED STATES; UV = BURKINA; UY = URUGUAY; UZ = UZBEKISTAN; VC = ST. VINCENT AND THE GRENADINES; VE = VENEZUELA; VI = BRITISH VIRGIN ISLANDS; VM = VIETNAM; VQ = VIRGIN ISLANDS; VT = VATICAN CITY; WA = NAMIBIA; WE = WEST BANK; WF = WALLIS AND FUTUNA; WI = WESTERN SAHARA; WQ = WAKE ISLAND; WS = SAMOA (In ATCCIS, "Western Samoa"); WZ = SWAZILAND; YM = YEMEN [In ATCCIS, "YS" represents "Yemen (Aden)" and "YE" represents "Yemen (Sanaa)"]; ZA = ZAMBIA; ZI = ZIMBABWE. Sources: DDDS (May 2000) and ATCCIS Generic Hub 4 (LC2IEDM).	
COUNTRY	COUNTRY NAME	CNTRY_nm	Name	varchar(50)	NULL	No	No	(14397) (A) THE NAME OF A COUNTRY.		
COUNTRY	COUNTRY Official Name {JCAPS}	CNTRY_of_nm	String	varchar(75)	NULL	No	No	THE FORMAL APPROVED NAME OF A COUNTRY.	Source: JCAPS 2.1 (CTRY_NM).	
COUNTRY	COUNTRY POSTAL NAME	CNTRY_pst_nm	String	varchar(35)	NULL	No	No	(33864) (A) THE NAME OF A COUNTRY AS CONSTRAINED BY POSTAL ADDRESSING FORMATS.		
COUNTRY	COUNTRY Scope Note Text {JCAPS}	CNTRY_scoop_note_tx	String	varchar(50)	NULL	No	No	(17362) (A) FREE FORM TEXT EXPLAINING SOME GEOGRAPHICAL OR POLITICAL CIRCUMSTANCE ASSOCIATED WITH A COUNTRY.	Source: JCAPS 2.1 (CTRY_SCP_NT_TX).	
DATA-ITEM	Data Item MATERIEL-ITEM Identifier	MATl_id	Id(int)	int	NOT NULL	Yes	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.		
DATA-ITEM	DATA-ITEM-TYPE Identifier	DIT_id	Id(int)	int	NULL	No	Yes	The identifier that represents a specific DATA-ITEM-TYPE.	Primary key was formerly DATA-ITEM-TYPE Code.	
DATA-ITEM-TYPE	DATA-ITEM-TYPE Class Code	DIT_cls_cd	String	char(1)	NULL	No	No	The code that denotes a specific grouping of a DATA-ITEM-TYPE.	C--Courier/Manual; F--Facsimile; A-Digital ASCII data; B-Digital bit-oriented data; I--Image; T--Text ASCII; L--Video Live; P--Position and navigation; S--Video still frame; V--Voice; Other; Not specified; Not known. [Derived from HDD for the Naval Architecture Database and Army C4RDP Database, modified during the CADM-ASA Workshop, 17-19 June 1998]	
DATA-ITEM-TYPE	DATA-ITEM-TYPE Code	DIT_cd	String	varchar(3)	NULL	No	No	The code that represents a class of DATA-ITEM-TYPE.	AC (ACINT); AIR (Air Situation); ASI (All Source Intelligence); ATC (Air Traffic Control); BAT (Battlefield Situation/Info/Picture); BSC (Battlespace Coordination); BSM (Battlespace Management); C2 (Command and Control); CBT (Combat Direction); COL (Collection Request/Tasking); CUE (Cueing); EW (Early Warning); FC (Fire Control); FD (Fire Direction); FMA (Fire Mission Adjustment); FSC (Fire	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
DATA-ITEM-TYPE	DATA-ITEM-TYPE Identifier	DIT_id	Id(int)	int	NOT NULL	Yes	No	The identifier that represents a specific DATA-ITEM-TYPE.	Support Coordination); HUM (HUMINT); ID (Object Identification); IM (IMINT); IME (Electro-Optical Imagery; IMI (Infrared Imagery); IMR (Raw Imagery); IMS (SAR Imagery); IMV (Video Imagery); MAS (MASINT); MSI; MSR (Mission Report); PHT (PHOTINT); PLT (Platform Status); RFF (Request/call for fire); RFI (Request for Intelligence); RIM (Radar Imagery); RIT (RADINT); SED (Sensor Data); SEN (Sensor Management); SG (SIGINT); SGR (Raw SIGINT); SUR (Surveillance); TGT (Target); THR (Threat Warning); TRK (Track); TSK (Tasking); VID (Video); WPC (Weapon Coordination); WPN (Weapon Direction/Management); WPS (Weapon/Mission Status); OTH = Other; NS = Not specified; NK = Not known.
DOCUMENT	CAVEATED-SECURITY-CLASSIFICATION IDENTIFIER	CSC_ID	Id(int)	int	NULL	No	Yes	(16225/1) (A) THE IDENTIFIER OF A CAVEATED-SECURITY-CLASSIFICATION. NOTE: BLOCKS OF IDENTIFIERS WILL BE ALLOCATED TO DEFENSE ORGANIZATIONS. IT WILL BE UP TO EACH DEFENSE ORGANIZATION TO ALLOCATE AND CONFIGURATION MANAGE ITS OWN IDENTIFIERS.	
DOCUMENT	DOCUMENT Abbreviated Title	DOC_abrv_title_nm	Name	varchar(50)	NULL	No	No	The shortened name of a specific DOCUMENT.	
DOCUMENT	DOCUMENT APPROVAL CALENDAR DATE	DOC_aprvl_caldt	Date	datetime	NULL	No	No	(16157/2) (A) THE CALENDAR DATE THAT A DOCUMENT IS APPROVED.	
DOCUMENT	DOCUMENT Architecture Product Type Code	DOC_arcprod_ty_cd	Code_smallint	smallint	NULL	No	No	The code that represents the kind of architecture product described by the DOCUMENT.	1 = Activity Model Specification; 2 = C4ISR Data Specification; 3 = Capability Matrix; 4 = Command Node Hierarchy; 5 = Command Relationship Chart; 6 = Concept Graphic; 7 = Data Dictionary Specification; 8 = Logical Data Model; 9 = Data Model Specification; 10 = Electronic Mail; 11 = Even-Trace Description; 12 = Framework; 13 = Functional Specification; 14 = Graphic; 15 = Node Tree; 16 = Information Exchange Matrix; 17 = Interface Control Document; 18 = Joint Publication; 19 = Joint Publication; 20 = Keyword; 21 = Manual; 22 = Map Chart; 23 = Map Overlay; 24 = Node Connectivity Description; 25 = System Performance Parameter Matrix; 26 = Physical Model Specification; 27 = Rule Model; 28 = State Transition Description; 29 = System Migration Evolution; 30 = System Overlay; 31 = Technical Criteria Document; 32 = Technology Forecast Matrix; 33 = Voice Mail; 34 = Standard Technology Forecast; 35 = System Address Book; 36 = System Evolution Description; 37 = System Functionality Description; 38 = System Function Traceability Matrix; 39 = System Interface Description; 40 = System-System-Matrix; 41 = System Technology Forecast; and 42 = Technical Architecture Profile.

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UNCLASSIFIED

Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
DOCUMENT	DOCUMENT CATEGORY CODE	DOC_cat_cd	String	char(1)	NULL	No	No	(18075) (C) THE CODE THAT REPRESENTS A CLASSIFICATION OF A DOCUMENT. (DDDS, June 1998; compare from CADM 1.0: The code that denotes the class of a specific DOCUMENT. It is used as a discriminator for subtypes of DOCUMENT.)	A--ADMINISTRATIVE DOCUMENT; B--GUIDANCE DOCUMENT; C--HEALTH DOCUMENT; D--HISTORICAL DOCUMENT; E--IDENTIFICATION DOCUMENT; F--LEGAL DOCUMENT; G--LOG DOCUMENT; H--ORDER DOCUMENT; I--PERSONNEL DOCUMENT; J--TECHNICAL DOCUMENT; K--TEST DOCUMENT. (DDDS, June 1998). [1-character (max) string]
DOCUMENT	DOCUMENT DESCRIPTION TEXT	DOC_desc_tx	String	varchar(99)	NULL	No	No	(18077) (C) THE TEXT THAT DESCRIBES A DOCUMENT. (DDDS, June 1998; compare from CADM 1.0: The text that summarizes a specific DOCUMENT.)	
DOCUMENT	DOCUMENT IDENTIFIER	DOC_ID	Id(int)	int	NOT NULL	Yes	No	(9643/2) (A) THE IDENTIFIER THAT REPRESENTS A DOCUMENT.	
DOCUMENT	DOCUMENT NAME	DOC_nm	String	varchar(240)	NULL	No	No	(7125/1) (A) THE NAME OF A DOCUMENT.	
DOCUMENT	DOCUMENT Notation Name	DOC_notation_nm	Name	varchar(50)	NULL	No	No	The name that specifies the syntactical language used in the DOCUMENT.	
DOCUMENT	DOCUMENT PUBLISHED DATE	DOC_publicnd_dt	Date	datetime	NULL	No	No	(20630) (D) THE DATE THAT A DOCUMENT IS PUBLISHED. (DDDS, June 1998; compare from CADM 1.0: The date that a specific DOCUMENT is released for distribution.)	
DOCUMENT	DOCUMENT REMARK TEXT	DOC_remark_tx	String	varchar(500)	NULL	No	No	THE TEXT OF COMMENTS ASSOCIATED WITH A DOCUMENT.	
DOCUMENT	DOCUMENT ROUTING CODE	DOC_routing_cd	String	char(1)	NULL	No	No	(42181/1) (C) THE CODE THAT DENOTES THE DISTRIBUTION CATEGORY SPECIFIED FOR A DOCUMENT. (DDDS, June 1998)	A--DOCUMENT INCLUDES DISTRIBUTION LIST; B--DOCUMENT DOES NOT INCLUDE DISTRIBUTION LIST (DDDS, Approved). [1-character (max) string]
DOCUMENT	DOCUMENT Source Name	DOC_src_nm	Name	varchar(50)	NULL	No	No	The name for the originator of a specific DOCUMENT.	
DOCUMENT	DOCUMENT Summary Description Text {JCAPS}	DOC_summary_desc_tx	String	varchar(2000)	NULL	No	No	TEXT WHICH DESCRIBES THE PRODUCT	Source: JCAPS 2.1 (SUMMARY_DTX).
DOCUMENT	DOCUMENT Time Frame Type Code	DOC_time_frame_ty_cd	Code_smallint	smallint	NULL	No	No	The code that denotes the class of time frame addressed by a specific ARCHITECTURE.	1--As is; 2--To be; 8--Not specified; 9--Not known.
DOCUMENT	DOCUMENT Universal Resource Locator Text	DOC_UR_L_tx	String	varchar(99)	NULL	No	No	The text that provides a World-Wide Web Universal Resource Locator (URL) access to a specific DOCUMENT.	Source: Army CADM Database Synchronization meeting at SIGCEN, 29-30 Aug 00.
DOCUMENT	DOCUMENT Version Identifier	DOC_version_id	String	varchar(20)	NULL	No	No	The identifier for a specific release of a DOCUMENT.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
DOCUMENT	SECURITY-CLASSIFICATION CODE	SC_cd	Code_smallint	smallint	NULL	No	Yes	(26900/3) (A) THE CODE THAT REPRESENTS A SECURITY-CLASSIFICATION. (DDDS, 10 August 2000)	01 = CONFIDENTIAL; 02 = CONFIDENTIAL RESTRICTED; 03 = FOR OFFICIAL USE ONLY; 04 = NATO CONFIDENTIAL; 05 = NATO CONFIDENTIAL ATOMAL; 06 = NATO RESTRICTED; 07 = NATO SECRET; 08 = NATO SECRET ATOMAL; 09 = NATO TOP SECRET; 10 = NATO TOP SECRET ATOMAL; 11 = SECRET; 12 = SECRET RESTRICTED; 13 = TOP SECRET; 14 = UNCLASSIFIED; 15 = UNCLASSIFIED SENSITIVE; 98 = NOT SPECIFIED; 99 = NOT KNOWN (DDDS, 10 August 2000)
DOCUMENT	Time Frame PERIOD Identifier	Time_Fr_PERIOD_id	Id(int)	int	NULL	No	Yes	(12180) (A) THE IDENTIFIER THAT REPRESENTS A PERIOD.	
DOCUMENT-ASSOCIATION	DOCUMENT-ASSOCIATION Identifier	DOCA_id	Id(int)	int	NOT NULL	Yes	No	The identifier of an instance of DOCUMENT-ASSOCIATION for a specific ordinate DOCUMENT and a specific subordinate DOCUMENT.	
DOCUMENT-ASSOCIATION	DOCUMENT-ASSOCIATION REASON CODE	DOCA_rns_cd	String	char(1)	NULL	No	No	(18078/1) (A) THE CODE THAT REPRESENTS THE UNDERLYING BASIS OF A DOCUMENT-ASSOCIATION.	A = DOCUMENT CANCELS OTHER DOCUMENT; B = DOCUMENT INCLUDES OTHER DOCUMENT; C = DOCUMENT REFERENCES OTHER DOCUMENT; D = DOCUMENT REPLACES OTHER DOCUMENT. (DDDS, 10 August 2000)
DOCUMENT-ASSOCIATION	DOCUMENT-ASSOCIATION Role Code	DOCA_role_cd	Code_smallint	smallint	NULL	No	No	The code that designates the way in which a SUBORDINATE document is related to an ordinate DOCUMENT.	1--is contained in; 2--Supersedes; 3--References; Provides Authority For; 4--Supplements; 8--Not Known; 9--Not Specified. Added for CADM 2.0: 5--is a depiction of.
DOCUMENT-ASSOCIATION	Ordinate DOCUMENT Identifier	Ord_DOC_ID	Id(int)	int	NOT NULL	Yes	Yes	(9643/2) (A) THE IDENTIFIER THAT REPRESENTS A DOCUMENT.	
DOCUMENT-ASSOCIATION	Subordinate DOCUMENT Identifier	Sub_DOC_ID	Id(int)	int	NOT NULL	Yes	Yes	(9643/2) (A) THE IDENTIFIER THAT REPRESENTS A DOCUMENT.	
DOCUMENT-CAVEATED-SECURITY-CLASSIFICATION	CAVEATED-SECURITY-CLASSIFICATION IDENTIFIER	CSC_ID	Id(int)	int	NOT NULL	Yes	Yes	(16225/1) (A) THE IDENTIFIER OF A CAVEATED-SECURITY-CLASSIFICATION. NOTE: BLOCKS OF IDENTIFIERS WILL BE ALLOCATED TO DEFENSE ORGANIZATIONS. IT WILL BE UP TO EACH DEFENSE ORGANIZATION TO ALLOCATE AND CONFIGURATION MANAGE ITS OWN IDENTIFIERS.	
DOCUMENT-CAVEATED-SECURITY-CLASSIFICATION	DOCUMENT IDENTIFIER	DOC_ID	Id(int)	int	NOT NULL	Yes	Yes	(9643/2) (A) THE IDENTIFIER THAT REPRESENTS A DOCUMENT.	
DOCUMENT-CAVEATED-SECURITY-CLASSIFICATION	DOCUMENT-CAVEATED-SECURITY-CLASSIFICATION EFFECTIVE CALENDAR DATE	DCSC_EFFECTIVE_DT	Date	datetime	NULL	No	No	(40672/2) (A) THE CALENDAR DATE WHEN A DOCUMENT-CAVEATED-SECURITY-CLASSIFICATION COMES INTO EFFECT.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
DOCUMENT-CAVEATED-SECURITY-CLASSIFICATION	DOCUMENT-CAVEATED-SECURITY-CLASSIFICATION TEXT	DCSC_EXPLN_TX	Text(255)	varchar(99)	NULL	No	No	(40673/2) (A) THE TEXT THAT DEFINES THE CIRCUMSTANCES OF A DOCUMENT-CAVEATED-SECURITY-CLASSIFICATION.	
DOCUMENT-CAVEATED-SECURITY-CLASSIFICATION	DOCUMENT-CAVEATED-SECURITY-CLASSIFICATION REASON CODE	DCSC_RSN_CD	Code_smallint	smallint	NULL	No	No	(40149/2) (A) THE CODE THAT REPRESENTS THE UNDERLYING BASIS OF A DOCUMENT-CAVEATED-SECURITY-CLASSIFICATION.	01 = ORIGINAL CLASSIFICATION; 02 = CLASSIFICATION AUTHORITY REGRADE; 03 = SCHEDULED DOWNGRADE; 04 = DECLASSIFICATION; 98 = NOT SPECIFIED; 99 = NOT KNOWN. (DDDS, 10 August 2000)
DOCUMENT-CAVEATED-SECURITY-CLASSIFICATION	SECURITY-CLASSIFICATION CODE	SC_cd	Code_smallint	smallint	NOT NULL	Yes	Yes	(26900/3) (A) THE CODE THAT REPRESENTS A SECURITY-CLASSIFICATION. (DDDS, 10 August 2000)	01 = CONFIDENTIAL; 02 = CONFIDENTIAL RESTRICTED; 03 = FOR OFFICIAL USE ONLY; 04 = NATO CONFIDENTIAL; 05 = NATO CONFIDENTIAL ATOMAL; 06 = NATO RESTRICTED; 07 = NATO SECRET; 08 = NATO SECRET ATOMAL; 09 = NATO TOP SECRET; 10 = NATO TOP SECRET ATOMAL; 11 = SECRET; 12 = SECRET RESTRICTED; 13 = TOP SECRET; 14 = UNCLASSIFIED; 15 = UNCLASSIFIED SENSITIVE; 98 = NOT SPECIFIED; 99 = NOT KNOWN (DDDS, 10 August 2000)
EQUIPMENT-TYPE	EQUIPMENT-TYPE Alternate Identifier	EQTY_alt_id	String	varchar(14)	NULL	No	No	(14422) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC TYPE OF EQUIPMENT (The approved name is EQUIPMENT-TYPE IDENTIFIER, a primary key for EQUIPMENT-TYPE).	
EQUIPMENT-TYPE	EQUIPMENT-TYPE CARGO AREA	EQTY_cgo_ar	Number, Real	float	NULL	No	No	(14425) (A) THE AREA OF THE FLOOR OR DECK SPACE REQUIRED TO STORE THE TYPE OF EQUIPMENT BEING DESCRIBED.	Units of SQUARE-FEET.
EQUIPMENT-TYPE	EQUIPMENT-TYPE CARGO HEIGHT	EQTY_cgo_ht_d_m	Number, Real	float	NULL	No	No	(14421) (A) THE HEIGHT DIMENSION OF THE EQUIPMENT TYPE BEING DEFINED.	Units of INCHES.
EQUIPMENT-TYPE	EQUIPMENT-TYPE CARGO LENGTH	EQTY_cgo_lgth_d_m	Number, Real	float	NULL	No	No	(14423) (A) THE LENGTH DIMENSION OF THE EQUIPMENT TYPE BEING DEFINED.	Units of INCHES.
EQUIPMENT-TYPE	EQUIPMENT-TYPE CARGO VOLUME	EQTY_cgo_vol	Number, Real	float	NULL	No	No	(14427) (A) THE VOLUME OF THE EQUIPMENT TYPE BEING DEFINED.	Units of MEASUREMENT-TONS.
EQUIPMENT-TYPE	EQUIPMENT-TYPE CARGO WEIGHT	EQTY_cgo_wt	Number, Real	float	NULL	No	No	(14428) (A) THE WEIGHT OF THE EQUIPMENT TYPE BEING DEFINED.	Units of SHORT-TONS.
EQUIPMENT-TYPE	EQUIPMENT-TYPE CARGO WIDTH	EQTY_cgo_wi_d_m	Number, Real	float	NULL	No	No	(14429) (A) THE WIDTH DIMENSION OF THE EQUIPMENT TYPE BEING DEFINED.	Units of INCHES.

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
EQUIPMENT-TYPE	EQUIPMENT-TYPE Category Code	EQT_Y_cat_cd	Code_smallint	smallint	NULL	No	No	The code that denotes the class of EQUIPMENT-TYPE. It serves as a discriminator of subtypes for EQUIPMENT-TYPE.	01--System; 02--Communication Equipment Item; 03--Sensor Equipment Item; 04--Land Vehicle Equipment Item; 05--Computer Equipment Item; 06--Aircraft Item; 07--Ship Item. Added for CADM 2.0 (Source: ASA Data Model): 08--Radio Type, 09--Switch Type, 10--Computer Workstation Type; 98--Not specified; 99--Not known.
EQUIPMENT-TYPE	EQUIPMENT-TYPE Make Identifier	EQT_Y_make_id	String	varchar(50)	NULL	No	No	The identifier of the originator of a specific EQUIPMENT-TYPE.	
EQUIPMENT-TYPE	EQUIPMENT-TYPE MODEL SERIES IDENTIFIER	EQT_Y_model_ser_id	String	varchar(50)	NULL	No	No	(14424) (A) AN IDENTIFIER THAT DENOTES A SPECIFIC MANUFACTURER PRODUCTION SERIES FOR A TYPE OF EQUIPMENT.	
EQUIPMENT-TYPE	MATERIEL-ITEM IDENTIFIER	MATL_id	Id(int)	int	NOT NULL	Yes	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	
EQUIPMENT-TYPE	Equipment Type MATERIEL-ITEM Identifier	Equip_Type_MATL_id	Id(int)	int	NOT NULL	Yes	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	
EQUIPMENT-TYPE	EQUIPMENT-TYPE-SOFTWARE-ITEM Role Code	EQT_Y_SW_role_cd	Code_smallint	smallint	NULL	No	No	The code that denotes the class of relation between a specific SOFTWARE-ITEM and a specific EQUIPMENT-ITEM.	1--Uses as an operating system; 2--Uses as a database management system; 3--Uses for information exchange; 4--Uses for access control; 5--Uses for security protection; 6--Uses for human-computer interface; 7--Uses for mapping; 8--Other; 98--Not specified; 99--Not known. (Augmented during the CADM-ASA Workshop, 17-19 June 1998)
EQUIPMENT-TYPE	Software Item MATERIEL-ITEM Identifier	SWL_MATL_id	Id(int)	int	NOT NULL	Yes	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	
EXCHANGE-NEED-LINE-REQUIREMENT	CAVEATED-SECURITY-CLASSIFICATION IDENTIFIER	CSC_ID	Id(int)	int	NULL	No	Yes	(16225/1) (A) THE IDENTIFIER OF A CAVEATED-SECURITY-CLASSIFICATION. NOTE: BLOCKS OF IDENTIFIERS WILL BE ALLOCATED TO DEFENSE ORGANIZATIONS. IT WILL BE UP TO EACH DEFENSE ORGANIZATION TO ALLOCATE AND CONFIGURATION MANAGE ITS OWN IDENTIFIERS.	
EXCHANGE-NEED-LINE-REQUIREMENT	Destination ORGANIZATION Identifier	Dest_ORG_id	Id(int)	int	NULL	No	Yes	(7875/1) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	
EXCHANGE-NEED-LINE-REQUIREMENT	Destination ORGANIZATION-TYPE Identifier	Dest_ORG_TGT_id	Id(int)	int	NULL	No	Yes	(11184) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC ORGANIZATION-TYPE.	
EXCHANGE-NEED-LINE-REQUIREMENT	Destination Resourcing ORGANIZATION Identifier	Dest_Res_ORG_id	Id(int)	int	NULL	No	Yes	(7875/1) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	

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Entity Name	Attribute Name	Col. Name	Do- main	Data- type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
EXCHANGE- NEED-LINE- REQUIREMENT	EXCH-NEED- LINE-REQ Automation Priority Code	ENLR_a utom_prt y_cd	String	char(1)	NULL	No	No	The code that represents how operationally important it is for a specific EXCHANGE-NEED-LINE-REQUIREMENT to be parsed and processed automatically. [HDD for Naval Architecture Database]	H--High; M--Medium; L--Low, where low may mean unimportant, infeasible, or currently automated. [HDD for Naval Architecture Database] Added for CADM 2.0: N--Not specified; X--Not known.
EXCHANGE- NEED-LINE- REQUIREMENT	EXCH-NEED- LINE-REQ Availability Indicator Code	ENLR_av ail_ind_c d	Code_ smalli nt	smallint	NULL	No	No	The code that represents the assessment of the current capability to obtain a physical link for a specific EXCHANGE-NEED-LINE-REQUIREMENT. [HDD for Naval Architecture Database]	1--Available; 2--Sometimes Available; 3--Never Available. [HDD for Naval Architecture Database] Added for CADM 2.0: 8--Not specified; 9--Not known.
EXCHANGE- NEED-LINE- REQUIREMENT	EXCH-NEED- LINE-REQ Constraint Text {JCAPS}	ENLR_cn str_tx	String	varchar(2 000)	NULL	No	No	THE TEXT THAT DESCRIBES LIMITATIONS ON THE USE OF AN EXCHANGE-NEED-LINE-REQUIREMENT.	Source: JCAPS 2.1 (ENLR_CNSTR_TX).
EXCHANGE- NEED-LINE- REQUIREMENT	EXCH-NEED- LINE-REQ Criticality Code	ENLR_cri t_cd	String	char(1)	NULL	No	No	The code that represents an evaluation of the mission essentiality of a specific EXCHANGE-NEED-LINE-REQUIREMENT. [HDD for Naval Architecture Database]	H--High; M--Medium; L--Low. [HDD for Naval Architecture Database] Added for CADM 2.0: N--Not specified; X--Not known.
EXCHANGE- NEED-LINE- REQUIREMENT	EXCH-NEED- LINE-REQ Description Text {JCAPS}	ENLR_d escr_tx	String	varchar(2 000)	NULL	No	No	THE TEXT THAT DESCRIBES AN EXCHANGE-NEED-LINE-REQUIREMENT.	Source: JCAPS 2.1 (EXCN_NDLN_REQ_DTX).
EXCHANGE- NEED-LINE- REQUIREMENT	EXCH-NEED- LINE-REQ Frequency Continuity Type Code	ENLR_fr eq_cntin _cd	String	varchar(2)	NULL	No	No	The time distribution of occurrence of use of an EXCHANGE-NEED-LINE-REQUIREMENT. [Derived from HDD for Naval Architecture Database]	C--Continuous; P--Periodic; AO--As Occurring (AO). [HDD for Naval Architecture Database]
EXCHANGE- NEED-LINE- REQUIREMENT	EXCH-NEED- LINE-REQ Interoperability Level Code	ENLR_int rop_lvl_c d	String	char(1)	NULL	No	No	The code that denotes the class of technical means intended to be used for a specific INFORMATION-EXCHANGE-REQUIREMENT.	A--Universal (Virtual C4I System) Interoperability; B--Advanced (Integrated Systems) Interoperability; C--Intermediate (Distributed Systems) Interoperability; D--Basic (Discrete Systems Interaction) Interoperability. [Levels of Information System Interoperability, C4ISR Architecture Framework, Version 1] Added for CADM 2.0: N--Not specified; X--Not known.
EXCHANGE- NEED-LINE- REQUIREMENT	EXCH-NEED- LINE-REQ Timeliness Code	ENLR_ti meliness _cd	String	varchar(2)	NULL	No	No	The code that characterizes how quickly information should be transmitted (relative to its time of origin) using a EXCHANGE-NEED-LINE-REQUIREMENT. Alternatively [HDD for Naval Architecture Database], the code that represents an evaluation of the time that is currently seen between the occurrence of the event of interest to the time it is available to the user. See EXCHANGE-NEED-LINE-IER Perishability Code.	RT--Real Time; NR--Near-Real-Time (< 1 sec); M--Moderate (1-10 sec); S--Slow (10 s - 10 m); VS-- Very Slow (>10 min). [HDD for Naval Architecture Database] Added for CADM 2.0: N--Not specified; X--Not known.
EXCHANGE- NEED-LINE- REQUIREMENT	Interop Req GUIDANCE Identifier	ExNdlN_ Req_GUI D_id	Id(int)	int	NOT NULL	Yes	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
EXCHANGE-NEED-LINE-REQUIREMENT	SECURITY-CLASSIFICATION CODE	SC_cd	Code_smallint	smallint	NULL	No	Yes	(26900/3) (A) THE CODE THAT REPRESENTS A SECURITY-CLASSIFICATION. (DDDS, 10 August 2000)	01 = CONFIDENTIAL; 02 = CONFIDENTIAL RESTRICTED; 03 = FOR OFFICIAL USE ONLY; 04 = NATO CONFIDENTIAL; 05 = NATO CONFIDENTIAL ATOMAL; 06 = NATO RESTRICTED; 07 = NATO SECRET; 08 = NATO SECRET ATOMAL; 09 = NATO TOP SECRET; 10 = NATO TOP SECRET ATOMAL; 11 = SECRET; 12 = SECRET RESTRICTED; 13 = TOP SECRET; 14 = UNCLASSIFIED; 15 = UNCLASSIFIED SENSITIVE; 98 = NOT SPECIFIED; 99 = NOT KNOWN (DDDS, 10 August 2000)
EXCHANGE-NEED-LINE-REQUIREMENT	Source ORGANIZATION Identifier	Src_ORG_id	Id(int)	int	NULL	No	Yes	(7875/1) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC STRUCTURE WITH A MISSION.	
EXCHANGE-NEED-LINE-REQUIREMENT	Source ORGANIZATION-TYPE Identifier	Src_ORGT_id	Id(int)	int	NULL	No	Yes	(11184) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC ORGANIZATION-TYPE.	
EXCHANGE-NEED-LINE-REQUIREMENT	Source Resourcing ORGANIZATION Identifier	Src_Res_ORG_id	Id(int)	int	NULL	No	Yes	(7875/1) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	
EXCHANGE-RELATIONSHIP-TYPE (ASA, C4RDP)	EXCHANGE-RELATIONSHIP-TYPE Approval Status Code	EXRELT_appr_sta_cd	Approval-Status Code	char(1)	NULL	No	No	The code that denotes the level of validity and/or approval for the data for a EXCHANGE-RELATIONSHIP-TYPE.	A = Approved; R = Requested; N = Notional; M = Modeling & Simulation; D = Disapproved; X = Archived. Source: C4RDP, Unit-Relationship Approval-Status Code--The code that denotes the level of validity and/or approval for the data for a Unit Relationship.
EXCHANGE-RELATIONSHIP-TYPE (ASA, C4RDP)	EXCHANGE-RELATIONSHIP-TYPE Code	EXRELT_cd	String	char(2)	NOT NULL	Yes	No	The code that identifies a specific EXCHANGE-RELATIONSHIP-TYPE.	NM = Adjacent Allied DIV/CORPS unit to DIV/CORPS unit; LM = Adjacent US DIV/CORPS unit to DIV/CORPS unit; G0 = Area Support to Supported; RR = CO to CO (different BDE - same DIV); LL = CO to CO (different BN - same BDE); AA = CO to CO (different Company - same BN); UU = CO to CO (different DIV - same CORPS); MP = Corps to Theater (EAC); PL = Corps unit to Host Nation unit; CO = Direct Support to Supported (ADA, ARTY & ENG spt); MN = DIV/CORPS unit to Adjacent Allied DIV/CORPS unit; ML = DIV/CORPS unit to Adjacent DIV/CORPS unit; GM = General Support to Mutual Supported; D0 = General Support to Supported (ADA, ARTY & ENG spt); F0 = GSR unit to Reinforced unit; OA = Higher to Lower in Chain of Command; KJ = Host Nation (Civil) to Theater (Army); LP = Host Nation unit to CORPS unit; 00 = INTRA (within the same unit); AO = Lower to Higher in Chain of Command; MG = Mutual Support Unit receiving General Support; TB = NATO Military to U.S. Army Unit; NP = Other U.S. Service unit to U.S. Army unit; OF = Reinforced unit to GSR unit; OG = Supported to Area Support; OC = Supported to Direct Support (ADA, ARTY & ENG Spt); OD = Supported to General Support (ADA, ARTY & ENG Spt); JK = Theater (Army) Unit to Host Nation (Civil); TT = Theater to Theater (Includes CONUS); PM = Theater(EAC) to Corps; BT = U.S. Army Unit to NATO Military; PN = U.S. Army unit to other U.S. Service unit; ZZ = UNDEFINED (Used for notional IERs only). Added: 98 = Not Specified; 99 = Not Known. Source: C4RDP, Unit-Relationship Code--The code that represents the relationship between the originator and receiver units.

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
EXCHANGE-RELATIONSHIP-TYPE {ASA, C4RDP}	EXCHANGE-RELATIONSHIP-TYPE Name	EXRELT_nm	String	varchar(60)	NULL	No	No	The name of the EXCHANGE-RELATIONSHIP-TYPE.	C4RDP, Unit-Relationship Name--The name of a Unit Relationship used to translate the Unit Relationship code into readable text.
EXCHANGE-RELATIONSHIP-TYPE {ASA, C4RDP}	EXCHANGE-RELATIONSHIP-TYPE Record Security Classification Code	EXRELT_rec_sec_cd	Security-Classification	char(1)	NULL	No	No	The code that denotes the security classification of the metadata describing the EXCHANGE-RELATIONSHIP-TYPE.	U = Unclassified, C = Confidential; S = Secret. Source: C4RDP, Unit-Relationship Security-Classification Code--The code that denotes the security classification of the metadata describing the Unit-Relationship.
EXCHANGE-RELATIONSHIP-TYPE {ASA, C4RDP}	EXCHANGE-RELATIONSHIP-TYPE Short Name	EXRELT_shrt_nm	String	varchar(20)	NULL	No	No	The name, in abbreviated format, of a EXCHANGE-RELATIONSHIP-TYPE.	C4RDP, Unit-Relationship Short Name--The name, in abbreviated format, of a Unit Relationship.
EXCHANGE-RELATIONSHIP-TYPE {ASA, C4RDP}	EXCHANGE-RELATIONSHIP-TYPE Facility-Transaction-Detail Identifier	OFTRDTL_id	Id(int)	int	NULL	No	Yes	The quantity of the database-generated key that represents the database table in which the transaction occurred.	Transaction-Detail Key Quantity
FUNCTIONAL-AREA	FUNCTIONAL-AREA Description Text {JCAPS}	FUNCAR_desc_tx	String	varchar(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A FUNCTIONAL-AREA.	Source: JCAPS 2.1 (FNCTNL_AR_DTX).
FUNCTIONAL-AREA	FUNCTIONAL-AREA Identifier	FUNCAR_id	Id(int)	int	NOT NULL	Yes	No	(20492) (A) THE IDENTIFIER THAT REPRESENTS A FUNCTIONAL-AREA.	
FUNCTIONAL-AREA	FUNCTIONAL-AREA MISSION TEXT	FUNCAR_msn_tx	String	varchar(2000)	NULL	No	No	(20226) (A) THE TEXT OF THE PURPOSE AND OBJECTIVES OF A FUNCTIONAL-AREA.	
FUNCTIONAL-AREA	FUNCTIONAL-AREA NAME	FUNCAR_nm	Name	varchar(50)	NULL	No	No	(20225) (A) THE NAME OF A FUNCTIONAL-AREA.	
FUNCTIONAL-AREA	FUNCTIONAL-AREA STEWARD NAME	FUNCAR_steward_nm	String	varchar(10)	NULL	No	No	(26755) (A) THE NAME OF THE MANAGER OF A FUNCTIONAL-AREA.	
FUNCTIONAL-AREA	FUNCTIONAL-AREA Type Code {JCAPS}	FUNCAR_ty_cd	Code-smallint	smallint	NULL	No	No	THE CODE THAT REPRESENTS A KIND OF FUNCTIONAL-AREA.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (FUNC_AR_TY_CD).
FUNCTIONAL-AREA	Proponent ORGANIZATION Identifier	ORG_id	Id(int)	int	NULL	No	Yes	(7875/1) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	
GUIDANCE	GUIDANCE AUTHORITY TEXT	GUID_AUTH_TX	Text(8000)	varchar(8000)	NULL	No	No	(22125/2) (A) THE TEXT OF THE AUTHORITY FOR PROMULGATING GUIDANCE.	
GUIDANCE	GUIDANCE BEGIN CALENDAR DATE-TIME	GUID_BGN_CAL_DTTM	Date-time	datetime	NULL	No	No	(12416/2) (A) THE CALENDAR DATE-TIME ON WHICH GUIDANCE STARTS. (DDDS, September 2000)	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
GUIDANCE	GUIDANCE CATEGORY CODE	GUID_C ND_CD AT_CD	Code_ smalli nt	smallint	NULL	No	No	(16170/3) (A) THE CODE THAT DENOTES A SPECIFIC CLASS OF GUIDANCE. (DDDS, June 1998)	01 = DOCTRINE; 02 = DIRECTIVE; 03 = MISSION-STATEMENT; 04 = POLICY; 05 = STATUTE; 06 = STRATEGY; 07 = MANUAL; 08 = REGULATION; 09 = PROCEDURE; 10 = OPERATION-ORDER; 11 = OPERATIONAL RULE; 12 = TECHNICAL GUIDELINE; 13 = INTEROPERABILITY REQUIREMENT (CCIR: FRIENDLY FORCE INFORMATION REQUIREMENT, ESSENTIAL ELEMENT OF FRIENDLY INFORMATION, PRIORITY INTELLIGENCE REQUIREMENT); 14 = GOAL; 15 = VISION; 16 = SPECIAL INSTRUCTION; 17 = WARNING ORDER; 18 = SERVICE SUPPORT ORDER; 19 = MOVEMENT ORDER; 20 = FRAGMENTARY ORDER; 21 = GENERAL INSTRUCTION; 22 = RISK ASSESSMENT; 98 = NOT SPECIFIED; 99 = NOT KNOWN. (DDDS, September 2000) Added for CADM 2.0: 24-Directed-Constraint.
GUIDANCE	GUIDANCE END CALENDAR DATE-TIME	GUID_E ND_CAL DTTM	Date_t ime	datetime	NULL	No	No	(12417/2) (A) THE CALENDAR DATE-TIME ON WHICH GUIDANCE CONCLUDES. (DDDS, September 2000)	
GUIDANCE	GUIDANCE FUNCTIONAL TYPE CODE	GUID_F UNC_TY _CD	Code_ smalli nt	smallint	NULL	No	No	(38127/3) (A) THE CODE THAT REPRESENTS A KIND OF GUIDANCE BY FUNCTIONAL AREA.	01 = BUDGET EXHIBIT SUPPORT; 02 = C4 ISR (COMMAND, CONTROL, COMMUNICATION AND COMPUTERS INTELLIGENCE, SURVEILLANCE, RECONNAISSANCE); 03 = CASH MANAGEMENT; 04 = COST; 05 = DEBT MANAGEMENT; 06 = ENVIRONMENTAL GUIDANCE; 07 = EXECUTION; 08 = EXPLOSIVES; 09 = FEE CHARGE; 10 = FINANCIAL; 11 = FUND RESTRICTION; 12 = GENERAL LEDGER ACCOUNT IMPLEMENTATION; 13 = INTEREST; 14 = LEAVE; 15 = MISCELLANEOUS INCOME REPORTING; 16 = OPERATIONAL SUPPORT OTHER THAN C4ISR; 17 = OUTLAY MANAGEMENT; 18 = PAY; 19 = PERSON AUTHORITY; 20 = POSITION; 21 = PROMPT PAY; 22 = WORK MEASUREMENT STANDARD; 98 = NOT SPECIFIED; 99 = NOT KNOWN. (DDDS, September 2000)
GUIDANCE	GUIDANCE IDENTIFIER	GUID_id	Id(int)	int	NOT NULL	Yes	No	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
GUIDANCE	GUIDANCE ISSUE CALENDAR DATE	GUID_iss ue_caldt	Date	datetime	NULL	No	No	(12418/2) (X) THE CALENDAR DATE ON WHICH GUIDANCE IS PROMULGATED. (DDDS, June 1998)	
GUIDANCE	GUIDANCE NAME	GUID_N M	String	varchar(250)	NULL	No	No	(12091/3) (A) THE NAME OF A GUIDANCE.	
GUIDANCE	GUIDANCE SUBJECT TEXT	GUID_S UBJ_TX	Text(8000)	varchar(8000)	NULL	No	No	(16169/2) (A) THE TEXT THAT DESCRIBES THE TOPIC OF A GUIDANCE. (DDDS, September 2000)	
GUIDANCE	GUIDANCE SYNOPSIS TEXT	GUID_S YNOPSI S_TX	Text(8000)	varchar(8000)	NULL	No	No	(12092/2) (A) THE TEXT THAT PROVIDES A CONDENSED DESCRIPTION OF AN OCCURRENCE OF GUIDANCE.	
GUIDANCE	GUIDANCE TEXT	GUID_T X	Text(8000)	varchar(8000)	NULL	No	No	(12093/2) (A) THE TEXT OF AN OCCURRENCE OF GUIDANCE IN ITS ENTIRETY.	
GUIDANCE	POINT-OF-CONTACT Identifier	POC_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific POINT-OF-CONTACT.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
GUIDANCE-ASSOCIATION	GUIDANCE-ASSOCIATION BEGIN CALENDAR DATE-TIME	GASSO_C_BGN_CALDTT_M	Dateime	datetime	NULL	No	No	(59589/1) (A) THE CALENDAR DATE-TIME A GUIDANCE-ASSOCIATION STARTS. (DDDS, September 2000)	
GUIDANCE-ASSOCIATION	GUIDANCE-ASSOCIATION END CALENDAR DATE-TIME	GASSO_C_END_CALDTT_M	Dateime	datetime	NULL	No	No	(59590/1) (A) THE CALENDAR DATE-TIME A GUIDANCE-ASSOCIATION CONCLUDES. (DDDS, September 2000)	
GUIDANCE-ASSOCIATION	GUIDANCE-ASSOCIATION IDENTIFIER	GASSO_C_ID	Id(int)	int	NOT NULL	Yes	No	(59591) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC GUIDANCE-ASSOCIATION. (DDDS, September 2000)	
GUIDANCE-ASSOCIATION	GUIDANCE-ASSOCIATION ROLE CODE	GASSO_C_ROLE_CD	Code_smallint	smallint	NULL	No	No	(18338/3) (A) THE CODE THAT REPRESENTS THE RATIONALE THAT ASSOCIATES ONE OCCURRENCE OF GUIDANCE TO ANOTHER OCCURRENCE. (DDDS, September 2000) 01 = IMPLEMENTS; 02 = INCLUDES; 03 = IS PART OF; 04 = IS THE SAME AS; 05 = SUPERSEDES; 06 = GROUPED WITH; 07 = REFERENCES; 08 = REPLACES; 98 = NOT SPECIFIED; 99 = NOT KNOWN. (DDDS, September 2000) CADM 2.0 adds: 11 = Specifies information needed for. For the Army CADM, "05" is interpreted to mean the Ordinate GUIDANCE supersedes the Subordinate GUIDANCE; and similarly for the other codes.	
GUIDANCE-ASSOCIATION	ORDINATE GUIDANCE IDENTIFIER	Ord_GUID_id	Id(int)	int	NOT NULL	Yes	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
GUIDANCE-ASSOCIATION	SUBORDINATE GUIDANCE IDENTIFIER	Sub_GUID_id	Id(int)	int	NOT NULL	Yes	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
GUIDANCE-DOCUMENT	DOCUMENT IDENTIFIER	DOC_ID	Id(int)	int	NOT NULL	Yes	Yes	(9643/2) (A) THE IDENTIFIER THAT REPRESENTS A DOCUMENT.	
GUIDANCE-DOCUMENT	GUIDANCE IDENTIFIER	GUID_id	Id(int)	int	NOT NULL	Yes	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
GUIDANCE-DOCUMENT	GUIDANCE-DOCUMENT Identifier	GUIDD_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a GUIDANCE-DOCUMENT for a specific GUIDANCE and a specific DOCUMENT.	
GUIDANCE-DOCUMENT	GUIDANCE-DOCUMENT Role Code	GUIDD_role_cd	Code_smallint	smallint	NULL	No	No	The code that designates the specific way in which a DOCUMENT is used for an instance of GUIDANCE. 1 = Is contained in; 2 = Is supported by; 3 = Is referenced in; 4 = Provides the rules for; 8 = Not specified; 9 = Not known.	
INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	CAVEATED-SECURITY-CLASSIFICATION IDENTIFIER	CSC_ID	Id(int)	int	NULL	No	Yes	(16225/1) (A) THE IDENTIFIER OF A CAVEATED-SECURITY-CLASSIFICATION. NOTE: BLOCKS OF IDENTIFIERS WILL BE ALLOCATED TO DEFENSE ORGANIZATIONS. IT WILL BE UP TO EACH DEFENSE ORGANIZATION TO ALLOCATE AND CONFIGURATION MANAGE ITS OWN IDENTIFIERS.	
INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	COMMUNICATION-MEDIUM Identifier	COMM_MED_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific COMMUNICATION-MEDIUM.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	Destination (Node 2) NODE Identifier	Des_Nod e_2_NO DE_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NODE.	
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	Destination PROCESS- ACTIVITY Identifier	Des_PA_ id	Id(int)	int	NULL	No	Yes	(29165/2) (A) THE IDENTIFIER THAT REPRESENTS A PROCESS- ACTIVITY.	
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	Destination TASK Identifier	Des_TS K_id	Id(int)	int	NULL	No	Yes	(9282) (A) THE IDENTIFIER THAT REPRESENTS A TASK.	
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	Exch Need Line Req GUIDANCE Identifier	ExNdn_ Req_GUI D_id	Id(int)	int	NULL	No	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	Info Exch Req GUIDANCE Identifier	InfoExcR eq_GUID _id	Id(int)	int	NOT NULL	Yes	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	Info Req GUIDANCE Identifier	Info_Req _GUID_ id	Id(int)	int	NULL	No	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	INFO-EXCH-REQ Alternate Identifier	IER_alt_ id	String	varchar(2 0)	NULL	No	No	The surrogate identifier for a specific IER.	Derived from C4RDP IER Key Quantity.
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	INFO-EXCH-REQ Alternate Identifier Source Name	IER_alt_ id_src_ nm	Name	varchar(5 0)	NULL	No	No	The name of the source for alternative identification of a specific INFORMATION-EXCHANGE-REQUIREMENT. Modified by IDA for Army CADM, Nov 99.	
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	INFO-EXCH-REQ Causal Event Trigger Text	IER_cau s_a_trgr_ tx	String	varchar(5 12)	NULL	No	No	The text which describes the event which will result in the information exchange for an INFORMATION-EXCHANGE-REQUIREMENT. Source: C4RDP (Information-Exchange- Requirement-Message Causal-Event-Trigger Text)	Text may include format description language for the event and conditions under which it occurs. Source: IER Workshop at IDA, 5 January 2000.

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
{EXCH-NEED-LINE-IER in CADM 2.0}	INFO-EXCH-REQ Cost-of-Failure Code	IER_cst_fail_cd	String	char(1)	NULL	No	No	The code that denotes the cost of failure associated with the failed transmission of the information content between the OPFACs by the IER. Source: Army Systems Architecture Data Model. Modified by IDA for Army CADM, Nov 99.	A = Mission Failure; B = Task Failure; C = Loss of Life; D = Minimal Impact (Source CJCSI 6212.01B); and X-Not known. Formerly (CADM 2.0): I-Indispensable; C-Critical; E-Essential. Source: U.S. Army C4RDP. Added for CADM 2.0: X-Not known. Revised for Army Integrated Model: A = Mission Failure; B = Task Failure; C = Loss of Life; D = Minimal Impact; I = Indispensable (Obsolete Code); R = Critical (Obsolete Code); E = Essential (Obsolete Code).
INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	INFO-EXCH-REQ Effective Date	IER_eff_dt	Date	datetime	NULL	No	No	The beginning of the period of validity of a specific INFORMATION-EXCHANGE-REQUIREMENT. Text(18) Source: Army Systems Architecture Data Model.	
INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	INFO-EXCH-REQ Format Type Code	IER_med_ia_cd	Code_smallint	smallint	NULL	No	No	The code that represents the type of physical form of the information element for a specific INFORMATION-EXCHANGE-REQUIREMENT. Note: Media is the physical form of the information element, not the communications medium used to send the information. Source: CJCSI 6212.01B (Rev 2, 20 Oct 99).	01 = Audio; 02 = Text; 03 = Graphic (to include facsimile); 04 = Imagery not otherwise specified; 05 = Imagery, Still; 06 = Imagery, Stop Motion; 07 = Imagery Full Motion; 08 = Data not otherwise specified; 09 = Data, ASCII; 10 = Data, bit-oriented; 98 = Not specified; 99 = Not known. Source: CJCSI 6212.01B (Rev 2, 20 Oct 99); Revised for JCAPS and accepted at IER Workshop (5 January 2000). [Formerly, 1--Audio, 2--Text, 3--Graphics, 4--Still Imagery, 5--Stop Motion Imagery, 6--Full Motion Imagery, 7--Data; 8--Not specified; 9--Not known.]
INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	INFO-EXCH-REQ Frequency Quantity	IER_freq_rt	Number	float	NULL	No	No	The number of times in one period that the IER will be exchanged. Source: MCEB memorandum for IER requirements for NETWORKS.	Rate is instances (of EXCHANGE-NEED-LINE-IER) per period; period is specified as EXCHANGE-NEED-LINE-IER Time Period Quantity.
INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	INFO-EXCH-REQ Grade-of-Service Rate	IER_grd_svc_rt	Number	float	NULL	No	No	The bit rate for a specific IER.	Rate is in bits per second.
INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	INFO-EXCH-REQ Graphic Page Quantity	IER_grap_hic_pg_qty	Number	int	NULL	No	No	The quantity of paginated images (e.g., graphic, facsimile) for the information element of an INFORMATION-EXCHANGE-REQUIREMENT. Source: CJCSI 6212.01B (Rev 2, 20 Oct 99).	
INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	INFO-EXCH-REQ Imagery Pixel Depth Quantity	IER_im_pxl_dpth_qty	Number	int	NULL	No	No	The number of bits that are used to characterize the information for each pixel in an image that is the subject of the INFO-EXCH-REQ. Source: JCAPS Data Standardization Working Group, accepted by the Army IER Workshop at IDA, 5 January 1999.	Unit is bits. The value "1" denotes black and white image with no additional information bits.
INFO-EXCH-REQ {EXCH-NEED-LINE-IER in CADM 2.0}	INFO-EXCH-REQ Imagery Pixel Quantity	IER_ima_g_pixel_qty	Number	int	NULL	No	No	The quantity of pixels expressing the size (e.g., for still or stop-motion imagery) for the information element of an INFORMATION-EXCHANGE-REQUIREMENT. Source: CJCSI 6212.01B (Rev 2, 20 Oct 99).	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	INFO-EXCH-REQ Method Broadcast Flag Code	IER_brdc t_flg_cd	Code_ smalli nt	smallint	NULL	No	No	The code that represents the logical value showing whether the INFORMATION-EXCHANGE-REQUIREMENT will be broadcast. Source: U.S. Army C4RDP, modified during the CADM-ASA Workshop (17-19 June 1998).	1--True (to be broadcast); 2--False (not to be broadcast); 8--Not specified; 9--Not known.
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	INFO-EXCH-REQ Method Multicast Flag Code	IER_mltc t_flg_cd	Code_ smalli nt	smallint	NULL	No	No	The code that represents the logical value showing whether the INFORMATION-EXCHANGE-REQUIREMENT will be multicast. Source: U.S. Army C4RDP, modified during the CADM-ASA Workshop (17-19 June 1998).	1--True (to be multicast); 2--False (not to be multicast); 8--Not specified; 9--Not known.
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	INFO-EXCH-REQ Method Voice- Video Duration Quantity	IER_vocv id_du_qy	Numb er, Real	float	NULL	No	No	The quantity of elapsed time of a voice-video transmission. Source: U.S. Army C4RDP, modified during the CADM-ASA Workshop (17-19 June 1998).	Quantity is measured in seconds.
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	INFO-EXCH-REQ Perishability Code	IER_pers habl_cd	String	char(1)	NULL	No	No	The code that denotes the length of useful life of the information being exchanged. Source: CADM-ASA Workshop (17-19 June 1998). Maximum length of time that the information contained in the information element remains useable, i.e., the information accurately depicts etc. (source: draft CJCSI 6212.01B).	B = 4 - 8 HOURS; C = 3 - 4 HOURS; D = 2 - 3 HOURS; E = 1 - 2 HOURS; F = 10 - 60 MINUTES; G = 1 - 10 MINUTES; H = 25 - 59 SECONDS; J = 11 - 24 SECONDS; K = 5 - 10 SECONDS; L = 1 - 4 SECONDS; M = Less than 1 SECOND. Source: U.S. Army C4RDP. Added for CADM 2.0: N = -Not specified; X = Not known. Added for JCAPS: T = >360 days; U = 180-360 days; V = 90-180 days; W = 30-90 days; X = 10-30 days; Y = 3-10 days; Z = 1-3 days; A = 8-24 hours.
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	INFO-EXCH-REQ Physical Means Code	IER_ph_ means_c d	Code_ smalli nt	smallint	NULL	No	No	The code that represents a non-automated process for exchanging the information element of an INFORMATION-EXCHANGE-REQUIREMENT. Source: IER Workshop at IDA, 5 January 2000.	1--Face-to-face meeting; 2--Courier; 3--Film; 4--Paper; 5--Magnetic Tape; 6--Optical Disk; 7--Magnetic Disk; 98--Not specified; 99--Not known. Source: IER Workshop at IDA, 5 January 2000.
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	INFO-EXCH-REQ Precedence Code	IER_prdc nce_cd	String	char(1)	NULL	No	No	The code that denotes the urgency of the information being exchanged. Source: CADM-ASA Workshop (17-19 June 1998).	R--Routine; P--Priority; O--Immediate; Z--Flash; Y--Flash Override. Source: U.S. Army C4RDP. Added for CADM 2.0: N--Not specified; X--Not known.
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	INFO-EXCH-REQ Preference Code	IER_prefr nc_cd	String	char(1)	NULL	No	No	The code that denotes the priority of expected use for a specific IER among other instances of IER. Modified during the CADM-ASA Workshop (17-19 June 1998). Modified by IDA for Army CADM, Nov 99.	P--Primary; S--Secondary; T--Tertiary; O--Other; N--Not specified; X--Not known.
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	INFO-EXCH-REQ Product Data Size Quantity	IER_prd_ dtsz_qy	Numb er, Real	float	NULL	No	No	The average number of bits in the communication product for a specific IER. Source: U.S. Army C4RDP, modified in the CADM-ASA Workshop (17-19 June 1998).	Unit is bits. User interface may wish to convert to Kbytes.

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	The code that represents the form of information content for the IER. Source: U.S. Army C4RDP, modified in the CADM-ASA Workshop (17-19 June 1998). Modified by IDA for Army CADM, Nov 99.	Attribute Definition	Attribute Domain Note
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	INFO-EXCH-REQ Product Format Code	IER_prod _fmt_cd	String	varchar(6)	NULL	No	No		<p>SPA001--C445 - NBC 1 SUMMARY REPORT - USMTF OCT 91; SPA002--C446 - NBC 2 SUMMARY REPORT - USMTF OCT 91; SPA003--C802 - LOGISTICS SITUATION REPORT - USMTF OCT 91; SPA004--C504 - FRIENDLY CHEM STRIKE WARNING - USMTF OCT 91; SPA005--C508 - BASIC WIND DATA REPORT - USMTF OCT 91; SPA006--A309 - OPERATIONAL TASKING DATA LINKS - USMTF OCT 91; SPA007--B930 - REAR AREA PROTECT UNIT STATUS-USMTF-OCT 91; SPA008--F658 - AIRSPACE CONTROL MEANS REQ - USMTF OCT 91; SPA009--F756 - AIRSPACE CONTROL ORDER - USMTF OCT 91; SPA010--D840 - MAINTENANCE SUPPORT REQUEST - USMTF OCT 91; SPA011-- S101 - SERIOUS INCIDENT REPORT - ACCS - OCT 91; SPA012-- A803 - FRIENDLY AIR MOVEMENT MESSAGE - COMB ANNEX; SPA013--C109 - AIR INTELLIGENCE REPORT - USMTF - OCT 91; SPA014--C119 - ELECTRONIC INTELLIGENCE REPORT - OCT 91; SPA015--C600 - CLOSE AIR SUPPORT SUMMARY - USMTF CCB 91; SPA016--D825 - TRANSPORTATION SUPPORT REQ - USMTF OCT 91; SPA017--D826 - TRANSPORT SUPPORT RESPONSE - USMTF OCT 91; SPA018--B925 - EPW/CIV INTERNEE STATUS - USMTF OCT 91; SPA019--B300 - SHIP STATUS REPORT - USMTF OCT 91; SPA020--B991 - CIVIL MIL OPERATIONS STATUS - USMTF OCT 91; SPA021--D825 - TRANSPORT SUPPORT REQUEST - USMTF OCT 91; SPA022--D826 - TRANSPORTATION SUPPORT RESPONSE - OCT 91; SPA023--F756 - AIRSPACE CONTROL ORDER - USMTF OCT 91; SPA024--D170 - INTEL COLL REQ'S NOMINATION -USMTF 1 OCT 91; SPA025--J007 - NBC 1 REPORT - STANAG 5624 - 1988; SPA026--J023 - NBC 2 REPORT - STANAG 5624 - 1988; SPA027--J026 - NBC 3 REPORT - STANAG 5624 - 1988; SPA028--J033 - NBC 4 REPORT - STANAG 5624 - 1988; SPA029--J034 - NBC 5 REPORT - STANAG 5624 - 1988; SPA030-- J062 - FRIENDLY NUC STRIKE WARNING STANAG 5624; SPA031-- F402 - EW FREQUENCY DECONFLICTION MSG - APR 92; SPA032--S306 - TERRAIN SUPPORT REQUEST MESSAGE - APR 92; SPA033--S303 - SALUTE REPORT - OCT 91; SPA034--D827 - ROAD CLEARANCE REQUEST - USMTF OCT 90; SPA035--S35 - MICROMET MESSAGE - 10 JUN 92; SPA036--S36 - UNIFORM GRIDDED DATA FIELDS - 10 JUN 92; SPA037--S37 - DIST ACCESS SITUATION DATA (UPDATE) 22 JULY 92; SPA038--S38 - ENEMY SIT DATA DATABASE SYNC - 22 JULY 92; SPA039--S39 - ENEMY ADMIN/LOGISTIC ORDER - USMTF OCT 91; SPA041--D869 - BULK PETRO RQMTS FORECAST - USMTF OCT 91; SPA042--D983 - EOD SUPPORT REQUEST - USMTF OCT 90; SPA043--F864 - WATER SUPPLY POINT - USMTF OCT 90; SPA044--S44 - COMMUNICATIONS CHANGE MESSAGE (03/11/92); SPA045--S45 - TELECOMMUNICATIONS SERVICE MSG (03/11/92); SPA046--S46 - FRIENDLY DATABASE (DATABASE SYNC); SPA047--S47 - FRIENDLY DATABASE (UPDATE); SPA048--B884 - NEO STATUS REPORT (USMTF); SPA049--C500 - PSYCHOLOGICAL REPORT (USMTF); SPA050--S50 - FRIENDLY RESOURCE DATA (DATABASE SYNC); SPA051--S51 - FRIENDLY RESOURCE DATA (UPDATE) - 14 JULY 93; SPA075--D828 - ROAD CLEARANCE RESPONSE; SPA076--S108 - TACTICAL MOVEMENT REQUEST/RESPONSE; SPA077--TERRAIN SUPPORT PRODUCTS (TSP); etc. (2,263 domain values). Source: U.S. Army C4RDP.</p>	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	INFO-EXCH-REQ Product Type Code	IER_prod _ty_cd	Code_ smalli nt	smallint	NULL	No	No	The code that represents the generic kind of message (product) exchanged between two or more communicating entities. Source: U.S. Army C4RDP, modified in the CADM-ASA Workshop (17-19 June 1998).	01-ACCS; 02--E-MAIL (X.400/500); 03-FTP; 04-I EW COMCAT; 05-IVIS; 06--USMTF-DATA; 07--USMTF-VOICE; 08--VMF; 09-UNDEFINED. Source: U.S. Army C4RDP. Added for CADM 2.0: 10-TADIL J; 11-ADATP-3; N-Not specified; X-Not known.
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	INFO-EXCH-REQ Speed-of-Service Code	IER_spd _svc_cd	String	varchar(2)	NULL	No	No	The code that denotes the speed of service requirements for transmission of the information content of the IER between the OPFACs. Source: Army Systems Architecture Data Model. Modified by IDA for Army CADM, Nov 99.	B = 4 - 8 HOURS; C = 3 - 4 HOURS; D = 2 - 3 HOURS; E = 1 - 2 HOURS; F = 10 - 60 MINUTES; G = 1 - 10 MINUTES; H = 25 - 59 SECONDS; J = 11 - 24 SECONDS; K = 5 - 10 SECONDS; L = 1 - 4 SECONDS; M = Less than 1 SECOND. Source: U.S. Army C4RDP. Added for CADM 2.0: N = -Not specified; X = Not known. Added for JCAPS: T = >360 days; U = 180-360 days; V = 90-180 days; W = 30-90 days; X = 10-30 days; Y = 3-10 days; Z = 1-3 days; A = 8-24 hours.
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	INFO-EXCH-REQ Status Code	IER_sta_ cd	String	varchar(2)	NULL	No	No	The code that denotes the condition of approval for an IER. Modified by IDA for Army CADM, Nov 99.	DR--Draft; PR--Proposed; IN--Interim Approval; AP--Approved; DP--Disapproved; AR--Archived; N-Not specified; X-Not known. Augmented during the CADM-ASA Workshop (17-19 June 1998).
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	INFO-EXCH-REQ Time Period Code	IER_tm_ per_cd	Code_ smalli nt	smallint	NULL	No	No	The code that presents the time period in effect for the frequency rate of IER transmissions. Source: Army Systems Architecture Data Model and MCEB memorandum for IER requirements for NETWARS, revised by CJCSI 6212.01B (Rev 2, 20 Oct 99).	01--One second; 02--One minute; 03--One hour; 04--One day; 05--One week; 06--One month; 07--One year; 08--More than one year; 09--Event driven; 10--As required; 11-Locally determined; 98--Not specified; 99--Not known.
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	NODE- ASSOCIATION Identifier	NA_ID	Id(int)	int	NULL	No	Yes	The identifier of a NODE-ASSOCIATION for a specific Node 1 NODE and a specific Node 2 NODE.	
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	Primary Transmission MATERIEL-ITEM Identifier	MATL_id	Id(int)	int	NULL	No	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	SECURITY- CLASSIFICATIO N CODE	SC_cd	Code_ smalli nt	smallint	NULL	No	Yes	(28900/3) (A) THE CODE THAT REPRESENTS A SECURITY-CLASSIFICATION. (DDDS, 10 August 2000)	01 = CONFIDENTIAL; 02 = CONFIDENTIAL RESTRICTED; 03 = FOR OFFICIAL USE ONLY; 04 = NATO CONFIDENTIAL; 05 = NATO CONFIDENTIAL ATOMAL; 06 = NATO RESTRICTED; 07 = NATO SECRET; 08 = NATO SECRET ATOMAL; 09 = NATO TOP SECRET; 10 = NATO TOP SECRET ATOMAL; 11 = SECRET; 12 = SECRET RESTRICTED; 13 = TOP SECRET; 14 = UNCLASSIFIED; 15 = UNCLASSIFIED SENSITIVE; 98 = NOT SPECIFIED; 99 = NOT KNOWN (DDDS, 10 August 2000)
INFO-EXCH-REQ {EXCH-NEED- LINE-IER in CADM 2.0}	Source (Node 1) NODE Identifier	Src_Nod e_1_NO DE_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NODE.	

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Annex M (Proposed Attribute Specifications)

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Proposed JCAPS View of the CADM

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
INFO-EXCH-REQ- {EXCH-NEED- LINE-IER in CADM 2.0}	Source PROCESS- ACTIVITY Identifier	Src_PA_id	Id(int)	int	NULL	No	Yes	(29165/2) (A) THE IDENTIFIER THAT REPRESENTS A PROCESS- ACTIVITY.	
INFO-EXCH-REQ- {EXCH-NEED- LINE-IER in CADM 2.0}	Source TASK Identifier	Src_TSK_id	Id(int)	int	NULL	No	Yes	(9282) (A) THE IDENTIFIER THAT REPRESENTS A TASK.	
INFO-EXCH-REQ- ASSURANCE	Info Exch Req GUIDANCE Identifier	InfoExReq_GUID_id	Id(int)	int	NOT NULL	Yes	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
INFO-EXCH-REQ- ASSURANCE	INFO-EXCH- REQ- ASSURANCE Access Control Type Code	IERA_ac_css_ctrl_cd	Code_smallint	smallint	NULL	No	No	The code that represents the class of mechanisms used to ensure only those authorized can access information or systems. 1 = Not Required--No checks of any kind; anybody can access the information or the information system (e.g., access to most world wide web sites); 2 = Profile--Access is controlled by assessing whether the individual seeking access displays the characteristics typically required (e.g., a car load of individuals are granted access to a post because they are in uniform and the car has a sticker); 3 = Password and Identification Document--Individual seeking access must be known and provide a predetermined password [e.g., bank ATMs require both the user's card (their ID) and the user to enter a Personal Identification Number (PIN) (their password)]; 4 = SSL (Secure Socks Layer (Server-based); 5 = ID Cert/ACL--An identification certificate AND presence of the identified entity on a valid Access Control List (ACL); 6 = Crypto Ignition Key (CIK)--Key required for secure access (e.g., STU III); 7 = Pairwise Key--The source encrypts the information and the destination decrypts the information using symmetric keys. Source: Information Assurance Architecture Working Group, December 1999.	
INFO-EXCH-REQ- ASSURANCE	INFO-EXCH- REQ- ASSURANCE Availability Effort Code	IERA_av_effrt_cd	Code_smallint	smallint	NULL	No	No	The code that represents the relative level of effort required to be expended to ensure the information can be accessed for use, i.e., systems and personnel are available at the required performance levels. Examples: An alert about a missile launch detection would have a HIGH availability effort requirement while a report about a delayed shipment of "Stars and Stripes" would likely have a LOW availability effort requirement. 1 = Low--Best effort to meet information exchange timeliness requirements with resources that are available; 2 = Medium--Specific resources have been allocated to ensure information exchange timeliness requirements are met; 3 = High--Pre-emptive resource allocation to meet information exchange timeliness requirements. Source: Information Assurance Architecture Working Group, December 1999.	
INFO-EXCH-REQ- ASSURANCE	INFO-EXCH- REQ- ASSURANCE Confidentiality Type Code	IERA_confid_ty_cd	Code_smallint	smallint	NULL	No	No	The code that represents the class of protection required for information to prevent unintended disclosure. 1 = Unavailable--Used in those "as is" circumstances where there is no capability to provide confidentiality for the information element; 2 = Not Required--For unclassified, uncaveated, public information; 3 = Clearance--An appropriate clearance for the level of classification of the information is required to access receive or access the information element; 4 = Need to Know--A determination that the individual needs the information and is authorized to use it is made before access is granted; if the information is classified, need to know also implies the individual has the appropriate clearance. Source: Information Assurance Architecture Working Group, December 1999.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
INFO-EXCH-REQ-ASSURANCE	INFO-EXCH-REQ-ASSURANCE Dissemination Control Type Code	IERA_dis_ctrl_ty_cd	Code_smallint	smallint	NULL	No	No	The code that represents the class of restrictions on receivers of information--whether accessing on-line sources of information or receiving information products--based on sensitivity of information.	1 = Public--Unrestricted (e.g., Defense LINK); 2 = Private--Restricted in accordance with Privacy Act (e.g., names of dependants); 3 = Controlled--Restricted in accordance with local command decision (e.g., release of deception plan outside of planning cell); 4 = Restricted--Restricted in accordance with established policy. Source: Information Assurance Architecture Working Group, December 1999.
INFO-EXCH-REQ-ASSURANCE	INFO-EXCH-REQ-ASSURANCE Information Criticality Code	IERA_info_crit_cd	Code_smallint	smallint	NULL	No	No	The code that represents the benefit that the information exchange element provides to the purpose and objective of the action being taken. Note: Mission Support and Administrative MAY be Mission Critical if essential to the operation (e.g., medical evacuation information). Note: The field values are drawn from the criticality measures used for Y2K.	1 = Category 1 Mission Critical (Force C2)--Critical and high level information (e.g., emergency action message, commander's guidance); 2 = Category 2 Mission Critical (Mission Operations)--Required in support to operations (e.g., JTF contingency plans, operations plan); 3 = Category 3 Mission Critical (Core Functions)--Ongoing information exchanges (e.g., configuration and guidance information, restricted frequency list); 4 = Mission Critical (not otherwise specified); 5 = Mission Support--Logistics, Transportation, Medical (e.g., gallons of POL scheduled for delivery); 6 = Administrative--Personnel, pay, training, etc. (e.g. change in allotment) Source: Information Assurance Architecture Working Group, December 1999.
INFO-EXCH-REQ-ASSURANCE	INFO-EXCH-REQ-ASSURANCE Integrity Type Code	IERA_integ_ty_cd	Code_smallint	smallint	NULL	No	No	The code that represents the class of requirements for checks that the content of the information element has not been altered, that the information received is exactly the information that was sent. Note: Whether the information is correct (see INFO-REQ Accuracy Text) is immaterial. Example: There could be Mandatory integrity checks required for Emergency Action Messages while similar checks would be Not Required for the message relaying next Tuesday's AFN schedule.	1 = Unavailable--Even though checks for integrity may be desirable, the capability to accomplish such checks is not currently available; 2 = Not required--This information and its uses do not call for the effort to check on integrity (e.g., an integrity check would not be required for printed copy of the Stars & Stripes; information transiting the JWICS is assumed to be safe and no integrity check is required); 3 = Discretionary--The decision on whether checks for integrity are to be accomplished is based on local decision; 4 = Mandatory--Checks for integrity are required. Source: Information Assurance Architecture Working Group, December 1999.
INFO-EXCH-REQ-ASSURANCE	INFO-EXCH-REQ-ASSURANCE Non-Repudiation Receiver Code	IERA_nonrep_rcv_cd	Code_smallint	smallint	NULL	No	No	The code that represents the requirements for unassailable knowledge that the information sent was received by the intended recipient. Note: Verification can be by human or electronic means.	1 = Proof of receipt is required; 2 = Proof of receipt is not required; 3 = Not available--Even though proof of receipt may be desirable, such capabilities are not currently available. Source: Information Assurance Architecture Working Group, December 1999.

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
INFO-EXCH-REQ-ASSURANCE	INFO-EXCH-REQ-ASSURANCE Non-Repudiation Sender Code	IERA_no_rep_snd_cd	Code_smallint	smallint	NULL	No	No	The code that represents the requirements for unassailable knowledge that the information received was sent by the stated source. Note: Verification can be by human or electronic means. Example: A unit would want Proof of Origin for an order directing them to a new target location.	1 = Proof of origin is required; 2 = Proof of origin is not required; 3 = Not available--Even though proof of origin may be desirable, such capabilities are not currently available. Source: Information Assurance Architecture Working Group, December 1999.
INFO-EXCH-REQ-ASSURANCE	INFO-EXCH-REQ-ASSURANCE Protection Duration Code	IERA_prot_dur_cd	Code_smallint	smallint	NULL	No	No	The code that represents the class of protection duration that applies to information assurance. Note: There will be cases where data has been declassified but information assurance protections are still required. For example, electronic records no longer classified--must still have integrity protection to ensure the data stored is not altered. Thus, the Protection Duration will not necessarily be the same as the downgrading instructions.	1 = None; 2 = Encrypted for Transmission Only (ETO)--After transmission is completed, information protection is not required; 3 = Specified OADR; 4 = Specified until explicit expiration date; 5 = Specified as End of Mission; 6 = Specified as a period of time beginning as of the date and time of transmission and ending after an explicitly provided length of time. Source: Information Assurance Architecture Working Group, December 1999.
INFO-EXCH-REQ-ASSURANCE	INFO-EXCH-REQ-ASSURANCE Protection Duration Quantity	IERA_prot_dur_qty	Number_Real	float	NULL	No	No	The length of time during which information assurance protections (e.g. information access, classification) of the information is required (e.g., 30 days).	Unit of measure: days.
INFO-EXCH-REQ-ASSURANCE	INFO-EXCH-REQ-ASSURANCE Protection Suspension Calendar Date	IERA_prot_susp_cal_dt	Date	datetime	NULL	No	No	The calendar date upon which the designated level of assurance protection expires.	
INFO-EXCH-REQ-ASSURANCE	INFO-EXCH-REQ-ASSURANCE Releaseability Code	IERA_rel_cd	Code_smallint	smallint	NULL	No	No	The code that represents the class of controls required for further dissemination of information based on policy or condition. Example: Operations information could be released to news media Conditional Upon Operational Commander's Situation Assessment.	1 = Unavailable--Used in those "as is" circumstances where there is no capability for dissemination authorization even if such capability is desirable; 2 = Routine--Information is released in accordance with established procedures and is released without exception to those established procedures; 3 = Conditional--Information released ONLY when specified conditions occur, and then in accordance with established authority and release procedures (e.g., host nation requirement for information as a specified exception case); operations information could be released to news media s "Conditional: 1 Hour after start of operation". Source: Information Assurance Architecture Working Group, December 1999.
INFO-EXCH-REQ-ASSURANCE	INFO-EXCH-REQ-ASSURANCE Condition Description Text	IERA_rel_condscr_txt	String	varchar(100)	NULL	No	No	The text that characterizes the condition that must be met for further dissemination to be permitted.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
INFO-EXCH-REQ-ELEMENT (ASA)	Consumer Battlefield Function TASK Identifier	CnBtlFnc_TSK_id	Id(int)	int	NULL	No	Yes	(9282) (A) THE IDENTIFIER THAT REPRESENTS A TASK.	
INFO-EXCH-REQ-ELEMENT (ASA)	IER-ELEMENT Approval Status Code	IERE_sta_cd	Approval Status Code	char(1)	NULL	No	No	The code that denotes the approval condition of a specific IER-ELEMENT. Source: U.S. Army C4RDP.	A = Approved; R = Requested; N = Notional; M = Modeling & Simulation; D = Disapproved; X = Archived. Source: U.S. Army C4RDP.
INFO-EXCH-REQ-ELEMENT (ASA)	IER-ELEMENT Modeling and Simulation Indicator Code	IERE_ms_ind_cd	Boolean	bit	NOT NULL	No	No	The code that denotes whether the IER-ELEMENT is suitable for use in modeling and simulation.	0 = False (not suitable), 1 = True (suitable). Source: C4RDP, Information-Exchange-Requirement-Person Modeling and Simulation Quantity (No definition provided).
INFO-EXCH-REQ-ELEMENT (ASA)	IER-ELEMENT Producer Activity Code	IERE_prd_act_cd	String	char(1)	NULL	No	No	The code that represents the activity of the producer of the Information Exchange Requirement. Source: U.S. Army C4RDP.	A-ATTACK, COUNTER-ATTACK, RECONNOITER; B-EXPLOIT, PURSUE; C-DEFEND, DELAY, SCREEN; D-PASSAGE (MOVING), RELIEVE; E-PASSAGE (STATIONARY), RELIEVE; F-MARCHING; G-MOVING TO CONTACT; H-COVERING FORCE; J-CLEARING OBSTACLE/MINEFIELD; K-CROSSING MINEFIELD; L-CROSSING RIVER; N-NBC OPS; R-RESERVE; S-COMBAT SERVICE SUPPORT; T-TACTICAL MISSILE DEFENSE; Z-NEEDLINE NOT QUALIFIED BY ACTIVITY. Source: U.S. Army C4RDP.
INFO-EXCH-REQ-ELEMENT (ASA)	IER-ELEMENT Receiver Mobility Code	IERE_rcv_r_mb_cd	String	char(1)	NULL	No	No	The code that represents the mobility status of the information sink. Source: U.S. Army C4RDP; CADM-ASA Workshop (17-19 June 1998).	A-MOBILE AIRCRAFT; B-MOBILE FOOT; M-MOBILE ANY MEANS; S-STATIONARY; T--TRACK VEHICLE; W--WHEEL VEHICLE; Z--ALL CASES; N--Not specified; X--Not known. Source: U.S. Army C4RDP.
INFO-EXCH-REQ-ELEMENT (ASA)	IER-ELEMENT Record Security Classification Code	IERE_rse_cl_cd	Security Classification	char(1)	NULL	No	No	The code that denotes the security classification of the metadata describing the IER-ELEMENT.	U = Unclassified, C = Confidential; S = Secret. Source: C4RDP, Information-Exchange-Requirement-Person Security-Classification Code--The code that denotes the security classification of the metadata describing the Information-Exchange-Requirement-Person.
INFO-EXCH-REQ-ELEMENT (ASA)	IER-ELEMENT Sender Mobility Code	IERE_snd_r_mb_cd	String	char(1)	NULL	No	No	The code that represents the mobility status of the information source. Source: U.S. Army C4RDP; CADM-ASA Workshop (17-19 June 1998).	A-MOBILE AIRCRAFT; B-MOBILE FOOT; M-MOBILE ANY MEANS; S-STATIONARY; T--TRACK VEHICLE; W--WHEEL VEHICLE; Z--ALL CASES; N--Not specified; X--Not known. Source: U.S. Army C4RDP.
INFO-EXCH-REQ-ELEMENT (ASA)	IER-ELEMENT Start Calendar Date	IERE_srt_caldt	DateTime	datetime	NULL	No	No	The calendar date that is the beginning of the effective period for a specific IER-ELEMENT.	C4RDP, Information-Exchange-Requirement-Person Start Date (No definition provided).
INFO-EXCH-REQ-ELEMENT (ASA)	IER-ELEMENT Stop Calendar Date	IERE_sto_caldt	DateTime	datetime	NULL	No	No	The calendar date that is the end of the effective period for a specific IER-ELEMENT.	C4RDP, Information-Exchange-Requirement-Person Stop Date (No definition provided).
INFO-EXCH-REQ-ELEMENT (ASA)	Info Exch Req GUIDANCE Identifier	InfoExchReq_GUID_id	Id(int)	int	NOT NULL	Yes	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
INFO-EXCH-REQ-ELEMENT (ASA)	Initiating Functional Operational Facility Identifier	InFOF_id	Id(int)	int	NULL	No	Yes	The identifier of a FUNCTIONAL-OPERATIONAL-FACILITY for a specific OPERATIONAL-FACILITY.	C4RDP (derived from Function-Operational-Facility Key Quantity).
INFO-EXCH-REQ-ELEMENT (ASA)	Initiating Operational Facility ORG-TYPE Identifier	InFOFc_ORGT_id	Id(int)	int	NULL	No	Yes	(11184) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC ORGANIZATION-TYPE.	
INFO-EXCH-REQ-ELEMENT (ASA)	MODELING-AND-SIMULATION-JUSTIFICATION Identifier	MS_JUST_id	Id(int)	int	NULL	No	Yes	The identifier of a specific MODELING-AND-SIMULATION-JUSTIFICATION.	
INFO-EXCH-REQ-ELEMENT (ASA)	OPERATIONAL-FACILITY-TRANSACTION-DETAIL Identifier	OFTRDTL_id	Id(int)	int	NULL	No	Yes	The quantity of the database-generated key that represents the database table in which the transaction occurred.	Transaction-Detail Key Quantity
INFO-EXCH-REQ-ELEMENT (ASA)	Producer Battlefield Function TASK Identifier	PrBtlFnc_TSK_id	Id(int)	int	NULL	No	Yes	(9282) (A) THE IDENTIFIER THAT REPRESENTS A TASK.	
INFO-EXCH-REQ-ELEMENT (ASA)	Receiver Battlefield Automated System SYSTEM Identifier	Rcvr_BAS_SYS_id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
INFO-EXCH-REQ-ELEMENT (ASA)	Receiving Functional Operational Facility Identifier	RcFOF_id	Id(int)	int	NULL	No	Yes	The identifier of a FUNCTIONAL-OPERATIONAL-FACILITY for a specific OPERATIONAL-FACILITY.	C4RDP (derived from Function-Operational-Facility Key Quantity).
INFO-EXCH-REQ-ELEMENT (ASA)	Receiving Operational Facility ORG-TYPE Identifier	RcOpFc_ORGT_id	Id(int)	int	NULL	No	Yes	(11184) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC ORGANIZATION-TYPE.	
INFO-EXCH-REQ-ELEMENT (ASA)	Sender Battlefield Automated System SYSTEM Identifier	Send_BAS_SYS_id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
INFO-EXCH-REQ-ELEMENT (ASA)	Transmitting Functional Operational Facility Identifier	TrFOF_id	Id(int)	int	NULL	No	Yes	The identifier of a FUNCTIONAL-OPERATIONAL-FACILITY for a specific OPERATIONAL-FACILITY.	C4RDP (derived from Function-Operational-Facility Key Quantity).
INFO-EXCH-REQ-ELEMENT (ASA)	Transmitting Operational Facility ORG-TYPE Identifier	TransOp_Fac_ORGT_id	Id(int)	int	NULL	No	Yes	(11184) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC ORGANIZATION-TYPE.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
INFO-EXCH-REQ-ELEMENT (ASA)	Using Functional Operational Facility Identifier	UsFOF_id	Id(int)	int	NULL	No	Yes	The identifier of a FUNCTIONAL-OPERATIONAL-FACILITY for a specific OPERATIONAL-FACILITY.	C4RDP (derived from Function-Operational-Facility Key Quantity).
INFO-EXCH-REQ-ELEMENT (ASA)	Using Operational Facility ORG-TYPE Identifier	UsingOp_Fac_ORGT_id	Id(int)	int	NULL	No	Yes	(11184) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC ORGANIZATION-TYPE.	
INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	Alternate Communication System SYSTEM Identifier	Alt_Comm_SYS_id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	Alternate Transmission MATERIEL-ITEM Identifier	Alt_Trans_MATL_id	Id(int)	int	NULL	No	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	
INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	IER-ELEMENT-METHOD Acknowledgment Indicator Code	IEREM_ackind_cd	Code_smallint	smallint	NULL	No	No	The code that represents the logical value showing whether receipt of the INFORMATION-EXCHANGE-REQUIREMENT should be acknowledged. Source: U.S. Army C4RDP, modified during the CADM-ASA Workshop (17-19 June 1998).	1--True (acknowledge receipt); 2--False (no receipt acknowledgment); 8--Not specified; 9--Not known.
INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	IER-ELEMENT-METHOD Intensity Code	IEREM_intens_cd	String	char(1)	NULL	No	No	The code that direction of change in use for a specific IER-ELEMENT. Source: U.S. Army C4RDP, modified during the CADM-ASA Workshop (17-19 June 1998).	I--Increasing; D--Decreasing; S--Static. Source: U.S. Army C4RDP. Added for CADM 2.0: N--Not specified; X--Not known.
INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	IER-ELEMENT-METHOD Multicast Group Identifier	IEREM_mlt_gr_id	Id(int)	int	NULL	No	No	The identifier of a specific set of instances of IER-ELEMENT-METHOD that are transmitted once to multiple recipients. Source: C4RDP.	Information-Exchange-Requirement-Method-Multicast Quantity (The quantity that identifies which multicast group the Information Exchange Requirement will participate in.)
INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	IER-ELEMENT-METHOD Record Security Classification Code	IEREM_sec_cd	Security-Classification	char(1)	NULL	No	No	The code that denotes the security classification of the metadata describing the IER-ELEMENT.	U = Unclassified, C = Confidential, S = Secret. Source: C4RDP. Information-Exchange-Requirement-Method Security-Classification Code--The code that denotes the security classification of the metadata describing the Information-Exchange-Requirement-Method.
INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	Info Exch Req GUIDANCE Identifier	InfoExcReq_GUID_id	Id(int)	int	NOT NULL	Yes	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	NETWORK Identifier	NTWK_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NETWORK.	
INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	Primary Communication System SYSTEM Identifier	Prim_Comm_SYS_id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	Receiver Terminal MATERIEL-ITEM Identifier	Rcvr_Term_MATL_id	Id(int)	int	NULL	No	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition		Attribute Domain Note
INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	Sender Terminal MATERIEL-ITEM Identifier	Send_Term_MATR_id	Id(int)	int	NULL	No	Yes	(10902) (A)	THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	
INFO-EXCH-REQ-ELEMENT-METHOD (ASA)	TRANSMISSION-MEANS-TYPE Code	TRNS_MTR_cd	String	char(1)	NULL	No	Yes	The code that represents the specific type of communication media characteristics.	C = Courier/Manual; D = Data; F = Facsimile; L = Live Video; P = POS/NAV; R = Record Traffic; S = Still Frame Video; V = Voice; Z = Undefined. Source: C4RDP, Communication-Characteristics Code--The code that represents the specific type of communication media characteristics.	
INFO-EXCH-REQ-ELEMENT-PRODUCT (ASA)	DATA-ITEM-TYPE Identifier	DIT_id	Id(int)	int	NULL	No	Yes	The identifier that represents a specific DATA-ITEM-TYPE.	Primary key was formerly DATA-ITEM-TYPE Code.	
INFO-EXCH-REQ-ELEMENT-PRODUCT (ASA)	EXCHANGE-RELATIONSHIP-TYPE Code	EXRELT_cd	String	char(2)	NULL	No	Yes	The code that identifies a specific EXCHANGE-RELATIONSHIP-TYPE.	NM = Adjacent Allied DIV/CORPS unit to DIV/CORPS unit; LM = Adjacent US DIV/CORPS unit to DIV/CORPS unit; G0 = Area Support to Supported; RR = CO to CO (different BDE - same DIV); LL = CO to CO (different BN - same BDE); AA = CO to CO (different Company - same BN); UU = CO to CO (different DIV - same CORPS); MP = Corps to Theater (EAC); PL = Corps unit to Host Nation unit; CO = Direct Support to Supported (ADA, ARTY & ENG spt); MN = DIV/CORPS unit to Adjacent Allied DIV/CORPS unit; ML = DIV/CORPS unit to Adjacent DIV/CORPS unit; GM = General Support to Mutual Supported; D0 = General Support to Supported (ADA, ARTY & ENG spt); F0 = GSR unit to Reinforced unit; 0A = Higher to Lower in Chain of Command; KJ = Host Nation (Civil) to Theater (Army); LP = Host Nation unit to CORPS unit; 00 = INTRA (within the same unit); A0 = Lower to Higher in Chain of Command; MG = Mutual Support Unit receiving General Support; TB = NATO Military to U.S. Army Unit; NP = Other U.S. Service unit to U.S. Army unit; 0F = Reinforced unit to GSR unit; 0G = Supported to Area Support; 0C = Supported to Direct Support (ADA, ARTY & ENG Spt); 0D = Supported to General Support (ADA, ARTY & ENG Spt); JK = Theater (Army) Unit to Host Nation (Civil); TT = Theater to Theater (includes CONUS); PM = Theater(EAC) to Corps; BT = U.S. Army Unit to NATO Military; PN = U.S. Army unit to other U.S. Service unit; ZZ = UNDEFINED (Used for notional IERs only). Added: 98 = Not Specified; 99 = Not Known. Source: C4RDP, Unit-Relationship Code--The code that represents the relationship between the originator and receiver units.	
INFO-EXCH-REQ-ELEMENT-PRODUCT (ASA)	IER-ELEMENT-PRODUCT Data Classification Code	IEREP_Dat_ClCd	String	char(1)	NULL	No	No	The code that represents the security classification of data contained in the actual IER-ELEMENT-PRODUCT.	U = Unclassified, C = Confidential; S = Secret. Source: C4RDP, Information-Exchange-Requirement-Message Data-Classification Code--The code that represents the security classification of data contained in the actual Information Exchange.	
INFO-EXCH-REQ-ELEMENT-PRODUCT (ASA)	IER-ELEMENT-PRODUCT Record Security Classification Code	IEREP_rsec_cd	Security-Classification	char(1)	NULL	No	No	The code that denotes the security classification of the metadata describing the IER-ELEMENT-PRODUCT.	U = Unclassified, C = Confidential; S = Secret. Source: C4RDP, Information-Exchange-Requirement-Message Security-Classification Code--The code that denotes the security classification of the metadata describing the Information-Exchange-Requirement-Message.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
INFO-EXCH-REQ-ELEMENT-PRODUCT (ASA)	IER-ELEMENT-PRODUCT Sub-Ratio-Rcvr Quantity	IEREP_s rsndr_qy	Numb er	int	NULL	No	No	The quantity of receivers of the Information Exchange Requirement from one or more senders in an IER-ELEMENT-PRODUCT.	C4RDP, Information-Exchange-Requirement-Message Sub-Ratio-Rcvr Quantity--The quantity of receivers of the Information Exchange Requirement from one or more senders.
INFO-EXCH-REQ-ELEMENT-PRODUCT (ASA)	IER-ELEMENT-PRODUCT Sub-Ratio-Sender Quantity	IEREP_s rsndr_qy	Numb er	int	NULL	No	No	The quantity of senders of the Information Exchange Requirement to one or more receivers in an IER-ELEMENT-PRODUCT.	C4RDP, Information-Exchange-Requirement-Message Sub-Ratio-Sender Quantity--The quantity of senders of the Information Exchange Requirement to one or more receivers.
INFO-EXCH-REQ-ELEMENT-PRODUCT (ASA)	Info Exch Req GUIDANCE Identifier	InfoExcR eq_GUID_id	Id(int)	int	NOT NULL	Yes	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
INFO-EXCH-REQ-ELEMENT-PRODUCT (ASA)	Message Standard AGREEMENT Identifier	Msg_Std _AGR_id	Id(int)	int	NULL	No	Yes	(12495) (A) THE IDENTIFIER THAT REPRESENTS AN AGREEMENT.	
INFORMATION-ELEMENT	Developing ORGANIZATION Identifier	ORG_id	Id(int)	int	NULL	No	Yes	(7875/1) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	
INFORMATION-ELEMENT	DOCUMENT IDENTIFIER	DOC_ID	Id(int)	int	NULL	No	Yes	(9643/2) (A) THE IDENTIFIER THAT REPRESENTS A DOCUMENT.	
INFORMATION-ELEMENT	INFO-ELEMENT CREATION DATE	IE_crea dt	Date	datetime	NULL	No	No	(20229) (A) THE CREATION DATE OF AN ICOM. Standardized under the entity name ICOM; changed to INFORMATION-ELEMENT for CADM 2.0.	
INFORMATION-ELEMENT	INFO-ELEMENT DEFINITION TEXT	IE_def_ix	String	varchar(9 gg)	NULL	No	No	(20230) (A) THE DEFINITION TEXT OF AN ICOM. Standardized under the entity name ICOM; changed to INFORMATION-ELEMENT for CADM 2.0.	
INFORMATION-ELEMENT	INFO-ELEMENT IDENTIFIER	IE_id	Id(int)	int	NOT NULL	Yes	No	(29164) (A) THE IDENTIFIER THAT REPRESENTS AN ICOM.	
INFORMATION-ELEMENT	INFO-ELEMENT NAME	IE_nm	String	varchar(1 00)	NULL	No	No	(20227) (A) THE NAME OF AN ICOM. Standardized under the entity name ICOM; changed to INFORMATION-ELEMENT for CADM 2.0.	
INFORMATION-ELEMENT	INFO-ELEMENT REVISION DATE	IE_rev_dt	Date	datetime	NULL	No	No	(20231) (A) THE AMENDMENT DATE OF AN ICOM. Standardized under the entity name ICOM; changed to INFORMATION-ELEMENT for CADM 2.0.	
INFORMATION-ELEMENT	INFO-ELEMENT Validation Indicator Code	IE_valid ind_cd	Code_ smalli nt	smallint	NULL	No	No	The code that indicates whether or not the ICOM has been officially sanctioned by the user as part of the operational architecture development process. Source: Army Systems Architecture Data Model, modified during the CADM-ASA Workshop (17-19 June 1998).	1--Approved; 2--Proposed; 3--Draft; 4--Conceptual; 5--Disapproved; 6--Archived; 8--Not specified; 9--Not known. Source: Army Systems Architecture Data Model, modified during the CADM-ASA Workshop (17-19 June 1998).
INFORMATION-ELEMENT	INFO-ELEMENT VERSION IDENTIFIER	IE_vers_i d	String	varchar(2 0)	NULL	No	No	(20228) (A) THE IDENTIFIER THAT REPRESENTS A RENDITION OF AN ICOM. Standardized under the entity name ICOM; changed to INFORMATION-ELEMENT for CADM 2.0.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
INFORMATION-ELEMENT-ASSOCIATION	INFORMATION-ELEMENT-ASSOCIATION DEFINITION TEXT	IEA_defn_tx	String	varchar(1024)	NULL	No	No	(20233) (A) THE TEXT THAT DEFINES AN INFORMATION-ELEMENT-ASSOCIATION. In the DoD Data model, this entity is named ICOM-ASSOCIATION.	
INFORMATION-ELEMENT-ASSOCIATION	INFORMATION-ELEMENT-ASSOCIATION Type Code	IEA_ty_cd	Code_smallint	smallint	NULL	No	No	The code that designates a class of INFORMATION-ELEMENT-ASSOCIATION.	1--Is identical with; 2--Is equivalent to (but not identical to); 3--Is part of; 4--Partially (but not totally) overlaps with; 8--Not specified; 9--Not known.
INFORMATION-ELEMENT-ASSOCIATION	Ordinate INFO-ELEMENT Identifier	Ord_IE_id	Id(int)	int	NOT NULL	Yes	Yes	(29164) (A) THE IDENTIFIER THAT REPRESENTS AN ICOM.	
INFORMATION-ELEMENT-ASSOCIATION	Subordinate INFO-ELEMENT Identifier	Sub_IE_id	Id(int)	int	NOT NULL	Yes	Yes	(29164) (A) THE IDENTIFIER THAT REPRESENTS AN ICOM.	
INFORMATION-EXCHANGE-MATRIX (OV-3; SV-6)	DOCUMENT IDENTIFIER	InfoExch_Mat_DOC_id	Id(int)	int	NOT NULL	Yes	Yes	(9643/2) (A) THE IDENTIFIER THAT REPRESENTS A DOCUMENT.	
INFORMATION-EXCHANGE-MATRIX (OV-3; SV-6)	INFORMATION-EXCHANGE-MATRIX Type Code	IEM_ty_cd	Code_smallint	smallint	NULL	No	No	The code that denotes a class of INFORMATION-EXCHANGE-MATRIX.	1--Operational Information Exchange Matrix; 2--System Information Exchange Matrix; 3--Other; 8--Not specified; 9--Not known.
INFORMATION-EXCHANGE-MATRIX-ELEMENT	COMMUNICATION-MEDIUM Identifier	COMM_MED_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific COMMUNICATION-MEDIUM.	
INFORMATION-EXCHANGE-MATRIX-ELEMENT	Data Item MATERIEL-ITEM Identifier	Data_ite_m_MATI_id	Id(int)	int	NULL	No	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	
INFORMATION-EXCHANGE-MATRIX-ELEMENT	Exch Need Line Req GUIDANCE Identifier	ExchNl_Req_GUID_id	Id(int)	int	NULL	No	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
INFORMATION-EXCHANGE-MATRIX-ELEMENT	Info Exch Req GUIDANCE Identifier	InfoExchReq_GUID_id	Id(int)	int	NULL	No	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
INFORMATION-EXCHANGE-MATRIX-ELEMENT	Info Req GUIDANCE Identifier	InfoReq_GUID_id	Id(int)	int	NULL	No	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null	PK	FK	Attribute Definition	Attribute Domain Note
INFORMATION-EXCHANGE-MATRIX-ELEMENT	Information Exchange Matrix DOCUMENT Identifier	InfoExch Mat_DO C_id	Id(int)	int	NOT NULL	Yes	Yes	(9643/2) (A) THE IDENTIFIER THAT REPRESENTS A DOCUMENT.	
INFORMATION-EXCHANGE-MATRIX-ELEMENT	INFORMATION-EXCHANGE-MATRIX-ELEMENT Identifier	IEM_ELE M_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a specific INFORMATION-EXCHANGE-MATRIX-ELEMENT for a specific INFORMATION-EXCHANGE-MATRIX. Compare: The identifier of a unique instance of an IER between two OFFACs. Long Integer. Source: Army Systems Architecture Data Model.	
INFORMATION-EXCHANGE-MATRIX-ELEMENT	INTERFACE Identifier {JCAPS}	INTF_id	Id(int)	int	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS AN INTERFACE. Source: JCAPS INTF_ID.	
INFORMATION-EXCHANGE-MATRIX-ELEMENT	Message Standard AGREEMENT Identifier	Msg_Std _AGR_id	Id(int)	int	NULL	No	Yes	(12495) (A) THE IDENTIFIER THAT REPRESENTS AN AGREEMENT.	
INFORMATION-EXCHANGE-MATRIX-ELEMENT	PROCESS-ACTIVITY IDENTIFIER	PA_id	Id(int)	int	NULL	No	Yes	(29165/2) (A) THE IDENTIFIER THAT REPRESENTS A PROCESS-ACTIVITY.	
INFORMATION-EXCHANGE-MATRIX-ELEMENT	Provider Software Item MATERIEL-ITEM Identifier	Prov_SW L_MATL_id	Id(int)	int	NULL	No	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	
INFORMATION-EXCHANGE-MATRIX-ELEMENT	Provider SYSTEM Identifier	Prov_SY S_id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
INFORMATION-EXCHANGE-MATRIX-ELEMENT	Recipient Software Item MATERIEL-ITEM Identifier	Recp_SW L_MATL_id	Id(int)	int	NULL	No	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	
INFORMATION-EXCHANGE-MATRIX-ELEMENT	Recipient SYSTEM Identifier	Recp_SY S_id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
INFORMATION-LINK	INFORMATION-LINK Latency Normal Time	INFOLN K_lat_nr m_tm	Numb er	float(14)	NULL	No	No	Average latency time that link should support during routine operations. Unit is seconds.	
INFORMATION-LINK	INFORMATION-LINK Latency Stressed Time	INFOLN K_lat_str _tm	Numb er	float(14)	NULL	No	No	Average latency time that link should support during peak operations. Unit is seconds.	
INFORMATION-LINK	INFORMATION-LINK Throughput Normal Rate	INFOLN K_thr_nr m_rt	Numb er	float(14)	NULL	No	No	Maximum available bandwidth required during routine operations. Unit is bits per second.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
INFORMATION-LINK	INFORMATION-LINK Throughput Stressed Rate	INFOLN_K_thr_str_rt	Numb er	float(14)	NULL	No	No	Maximum available bandwidth required during peak operations.	Unit is bits per second.
INFORMATION-LINK	Node 1 NODE Identifier	Node_1_NODE_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
INFORMATION-LINK	Node 2 NODE Identifier	Node_2_NODE_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
INFORMATION-LINK	NODE-ASSOCIATION Identifier	NA_ID	Id(int)	int	NOT NULL	Yes	Yes	The identifier of a NODE-ASSOCIATION for a specific Node 1 NODE and a specific Node 2 NODE.	
INFORMATION-REQUIREMENT {IER in CADM 2.0}	CAVEATED-SECURITY-CLASSIFICATION IDENTIFIER	CSC_ID	Id(int)	int	NULL	No	Yes	(16225/1) (A) THE IDENTIFIER OF A CAVEATED-SECURITY-CLASSIFICATION. NOTE: BLOCKS OF IDENTIFIERS WILL BE ALLOCATED TO DEFENSE ORGANIZATIONS. IT WILL BE UP TO EACH DEFENSE ORGANIZATION TO ALLOCATE AND CONFIGURATION MANAGE ITS OWN IDENTIFIERS.	
INFORMATION-REQUIREMENT {IER in CADM 2.0}	Info Req GUIDANCE Identifier	Info_Req_GUID_id	Id(int)	int	NOT NULL	Yes	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
INFORMATION-REQUIREMENT {IER in CADM 2.0}	INFO-ELEMENT IDENTIFIER	IE_id	Id(int)	int	NULL	No	Yes	(29164) (A) THE IDENTIFIER THAT REPRESENTS AN ICOM.	
INFORMATION-REQUIREMENT {IER in CADM 2.0}	INFO-REQ Accuracy Description Text	IR_acc_desc_tx	String	varchar(250)	NULL	No	No	The text that summarizes the degree of correctness of a specific INFORMATION-REQUIREMENT.	
INFORMATION-REQUIREMENT {IER in CADM 2.0}	INFO-REQ Availability Indicator Code	IR_avail_ind_cd	String	char(1)	NULL	No	No	The code that represents the assessment of the current capability to obtain the information for a specific INFORMATION-REQUIREMENT. [Derived from the HDD for the Naval Architecture Database]	A--Available; S--Sometimes Available; N--Never Available. [HDD for Naval Architecture Database]
INFORMATION-REQUIREMENT {IER in CADM 2.0}	INFO-REQ Content Description Text	IR_cntnt_desc_tx	String	varchar(250)	NULL	No	No	The text that amplifies the designation of the data incorporated into a specific INFORMATION-REQUIREMENT.	
INFORMATION-REQUIREMENT {IER in CADM 2.0}	INFO-REQ Description Text {JCAPS}	IR_desc_tx	String	varchar(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A MESSAGE.	Source: JCAPS 2.1 (MSG_DSC_TX).
INFORMATION-REQUIREMENT {IER in CADM 2.0}	INFO-REQ Exchange Frequency Text {JCAPS}	IR_exch_freq_tx	String	varchar(250)	NULL	No	No	THE FREQUENCY AT WHICH THE MESSAGE IS TO BE SENT	Source: JCAPS 2.1 (FREQ_OF_EXCN).
INFORMATION-REQUIREMENT {IER in CADM 2.0}	INFO-REQ Interoperability Level Code	IR_intero_lvl_cd	String	char(1)	NULL	No	No	The code that denotes the class of technical means intended to be used for a specific INFORMATION-REQUIREMENT.	A--Universal (Virtual C4i System) interoperability; B--Advanced (Integrated Systems) interoperability; C--Intermediate (Distributed Systems) interoperability; D--Basic (Discrete Systems Interaction) interoperability. [Levels of Information System Interoperability, C4ISR Architecture Framework, Version 1]. Added for CADM 2.0: N--Not specified; X--Not known.
INFORMATION-REQUIREMENT {IER in CADM 2.0}	INFO-REQ Purpose Description Text	IR_purp_desc_tx	String	varchar(250)	NULL	No	No	The text that characterizes the objective of a specific INFORMATION-REQUIREMENT.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
INFORMATION-REQUIREMENT {IER in CADM 2.0}	INFO-REQ Quality Code	IR_qualit_y_cd	String	char(1)	NULL	No	No	The code that represents the level of clarity of a specific INFORMATION-REQUIREMENT.	C--Clearly defined; G--Generally defined; I--Inadequately described; N--Not specified; X--Not known.
INFORMATION-REQUIREMENT {IER in CADM 2.0}	INFO-REQ Short Name	IR_shrt_nm	Name	varchar(50)	NULL	No	No	The common, abbreviated name for a specific INFORMATION-REQUIREMENT.	
INFORMATION-REQUIREMENT {IER in CADM 2.0}	INFO-REQ Subscription Type Text	IR_subscrpt_tx	String	varchar(250)	NULL	No	No	The text that summarizes the class of control associated with disseminating a specific INFORMATION-REQUIREMENT.	
INFORMATION-REQUIREMENT {IER in CADM 2.0}	INFO-REQ Timeliness Code	IR_timeliness_cd	String	varchar(3)	NULL	No	No	The code that denotes the proximity of the occurrence of the data to the transmission of that date for a specific INFORMATION-REQUIREMENT.	RT--Real-Time; NRT--Near-Real-Time (< 1 sec); M--Moderate (1-10 sec); S--Slow (10 s - 10 m); VS-- Very Slow (>10 min). [HDD for Naval Architecture Database]. Added for JCAPS: 1H (10 min - 1 hr); 8H (1 hr - 8 hr); 1D (8 hr - 24 hrs); 1M (1 day - 30 days); LG (Greater than 30 days)]--may want to delete the previous value, VS.
INFORMATION-REQUIREMENT {IER in CADM 2.0}	INFO-REQ Transaction Type Text	IR_trnsact_tx	String	varchar(250)	NULL	No	No	The text that summarizes the intended method of transmission for a specific INFORMATION-REQUIREMENT.	
INFORMATION-REQUIREMENT {IER in CADM 2.0}	INFO-REQ Volume Indicator Code	IR_vol_ind_cd	String	char(1)	NULL	No	No	The code that represents an estimate of the amount of relevant information that is provided for a specific INFORMATION-REQUIREMENT. [HDD for Naval Architecture Database]	H--High; M--Medium; L--Low. [HDD for Naval Architecture Database]. Added for CADM 2.0: N--Not specified; X--Not known.
INFORMATION-REQUIREMENT {IER in CADM 2.0}	SECURITY-CLASSIFICATION CODE	SC_cd	Code_smallint	smallint	NULL	No	Yes	(28900/3) (A) THE CODE THAT REPRESENTS A SECURITY-CLASSIFICATION. (DDDS, 10 August 2000)	01 = CONFIDENTIAL; 02 = CONFIDENTIAL RESTRICTED; 03 = FOR OFFICIAL USE ONLY; 04 = NATO CONFIDENTIAL; 05 = NATO CONFIDENTIAL ATOMAL; 06 = NATO RESTRICTED; 07 = NATO SECRET; 08 = NATO SECRET ATOMAL; 09 = NATO TOP SECRET; 10 = NATO TOP SECRET ATOMAL; 11 = SECRET; 12 = SECRET RESTRICTED; 13 = TOP SECRET; 14 = UNCLASSIFIED; 15 = UNCLASSIFIED SENSITIVE; 98 = NOT SPECIFIED; 99 = NOT KNOWN (DDDS, 10 August 2000)
INFORMATION-REQUIREMENT- DATA-ITEM- TYPE	DATA-ITEM- TYPE Identifier	DI_id	Id(int)	int	NOT NULL	Yes	Yes	The identifier that represents a specific DATA-ITEM-TYPE.	Primary key was formerly DATA-ITEM-TYPE Code.
INFORMATION-REQUIREMENT- DATA-ITEM- TYPE	Info Req GUIDANCE Identifier	Info_Req_GUID_id	Id(int)	int	NOT NULL	Yes	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
INTERFACE {JCAPS}	INTERFACE Description Text {JCAPS}	INTF_desc_tx	String	varchar(2000)	NULL	No	No	THE TEXT WHICH DESCRIBES THE INTERFACE	Source: JCAPS 2.1 (INTF_DESC_TXT).
INTERFACE {JCAPS}	INTERFACE Identifier {JCAPS}	INTF_id	Id(int)	int	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS AN INTERFACE.	Source: JCAPS INTF_ID.
INTERFACE {JCAPS}	INTERFACE Name {JCAPS}	INTF_nm	String	varchar(250)	NULL	No	No	THE NAME OF THE INTERFACE	Source: JCAPS 2.1 (INTF_NAME).
INTERFACE {JCAPS}	INTERFACE-TYPE Identifier {JCAPS}	INTF_ty_id	Id(int)	int	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS A GENERIC TYPE OF INTERFACE	Source: JCAPS 2.1 (INTF_TY_ID).

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
INTERFACE {JCAPS}	Receiving NODE Identifier	Rec_NO DE_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NODE.	
INTERFACE {JCAPS}	Receiving NODE-SYSTEM Identifier	Rec_NO _SYS_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NODE-SYSTEM for a specific NODE and a specific SYSTEM.	
INTERFACE {JCAPS}	Receiving SYSTEM Identifier	Rec_SY S_id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
INTERFACE {JCAPS}	Sending NODE Identifier	Send_N ODE_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NODE.	
INTERFACE {JCAPS}	Sending NODE-SYSTEM Identifier	Send_N D_SYS_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NODE-SYSTEM for a specific NODE and a specific SYSTEM.	
INTERFACE {JCAPS}	Sending SYSTEM Identifier	Send_SY S_id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
INTERFACE-CONTROL-DOCUMENT	DOCUMENT IDENTIFIER	DOC_ID	Id(int)	int	NOT NULL	Yes	Yes	(9643/2) (A) THE IDENTIFIER THAT REPRESENTS A DOCUMENT.	
INTERFACE-IER-ASSOCIATION {JCAPS}	Info Exch Req GUIDANCE Identifier	InfoExReq_GUID_id	Id(int)	int	NOT NULL	Yes	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
INTERFACE-IER-ASSOCIATION {JCAPS}	INTERFACE Identifier {JCAPS}	INTF_id	Id(int)	int	NOT NULL	Yes	Yes	THE IDENTIFIER THAT REPRESENTS AN INTERFACE.	Source: JCAPS INTF_ID.
INTERFACE-IER-ASSOCIATION {JCAPS}	INTERFACE-IER-ASSOCIATION Identifier {JCAPS}	INTF_IER_ASN_ID	Id(int)	int	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS AN INFORMATION EXCHANGE REQUIREMENT - INTERFACE RELATIONSHIP	Source: JCAPS 2.1 (INTF_IER_ASN_ID).
INTERFACE-TYPE {JCAPS}	COMMUNICATION-CIRCUIT-TYPE Code {JCAPS}	COMMCI RTY_cd	Code_smallint	smallint	NULL	No	Yes	THE CODE THAT DENOTES A CLASS OF COMMUNICATION-CIRCUIT-TYPE.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (COM_CIR_TY_CD).
INTERFACE-TYPE {JCAPS}	COMMUNICATION-CIRCUIT-TYPE Identifier {JCAPS}	COMMCI RTY_id	Id(int)	int	NULL	No	Yes	The identifier of a specific COMMUNICATION-CIRCUIT-TYPE for a specific class.	Source: JCAPS 2.1 (COM_CIR_TY_ID).
INTERFACE-TYPE {JCAPS}	COMMUNICATION N-LINK-TYPE Identifier {JCAPS}	COMM_LNK_TY_id	Id(int)	int	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS A COMMUNICATION LINK TYPE	Source: JCAPS 2.1 (COMM_LNK_TY_ID).
INTERFACE-TYPE {JCAPS}	INTERFACE-TYPE Auto Code {JCAPS}	INTF_TY _auto_cd	Code_smallint	smallint	NULL	No	No	CODE USED BY JCAPS FOR AUTO ROUTING FOR THE INTERFACE-TYPE.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (INTF_TY_AUTO_CD).
INTERFACE-TYPE {JCAPS}	INTERFACE-TYPE Description Text {JCAPS}	INTF_TY _descr_txt	String	varchar(2000)	NULL	No	No	THE TEXT WHICH DESCRIBES THE INTERFACE-TYPE.	Source: JCAPS 2.1 (INTF_TY_DESC_TXT).
INTERFACE-TYPE {JCAPS}	INTERFACE-TYPE Identifier {JCAPS}	INTF_TY _id	Id(int)	int	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A GENERIC TYPE OF INTERFACE	Source: JCAPS 2.1 (INTF_TY_ID).

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition		Attribute Domain Note
								THE NAME OF THE INTERFACE-TYPE.	Source: JCAPS 2.1 (INTF_TY_NAME).	
INTERFACE-TYPE {JCAPS}	INTERFACE-TYPE Name {JCAPS}	INTF_TY_nm	String	varchar(250)	NULL	No	No			
INTERFACE-TYPE {JCAPS}	INTERFACE-TYPE Year 2000 Compliance Level Code {JCAPS}	INTF_TY_Y2K_cmp_cd	Code_smallint	smallint	NULL	No	No	THE CODE WHICH REPRESENTS THE LEVEL OF Y2K COMPLIANCE THIS INTERFACE MEETS.	1 = Level 0 - Retired; 2 = Level 1a - Indep. testing - Full capability; 3 = Level 1b - Indep. testing - Partial dual year capability; 4 = Level 1c - Indep. testing - Partial single year capability; 5 = Level 2a - Indep. audit of testing - Full capability; 6 = Level 2b - Indep. audit of testing - Partial dual year capability; 7 = Level 2c - Indep. audit of testing - Partial single year capability; 8 = Level 3a - Self-certification - Full capability; 9 = Level 3b - Self-certification - Partial dual year capability; 10 = Level 3c - Self-certification - Partial single year capability; 11 = Level 4 - Non-compliance; 98 = Not specified; 99 = Not known. Source: JCAPS IDD for JCAPS 2.1 (Y2K_COMP_LVL_CD).	
INTEROPERABILITY-REQUIREMENT	FUNCTIONAL-AREA IDENTIFIER	FUNCAR_id	Id(int)	int	NULL	No	Yes	(20492) (A) THE IDENTIFIER THAT REPRESENTS A FUNCTIONAL-AREA.		
INTEROPERABILITY-REQUIREMENT	Interop Req GUIDANCE Identifier	InteropReq_GUID_id	Id(int)	int	NOT NULL	Yes	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.		
INTEROPERABILITY-REQUIREMENT	INTEROPERABILITY-REQUIREMENT Alternate Identifier {JCAPS}	INOP_REQ_EQ_alt_id	String	varchar(20)	NULL	No	No	The surrogate identifier for a specific INFORMATION-REQUIREMENT.	Source: JCAPS 2.1 (IER_ID, EXCN_ND_LN_REQ_ID, MESSAGE_ID).	
INTEROPERABILITY-REQUIREMENT	INTEROPERABILITY-REQUIREMENT Alternate Identifier Source Name {JCAPS}	INOP_REQ_EQ_altsrc_nm	String	varchar(20)	NULL	No	No	The name of the originator of the alternate identifier for a specific INFORMATION-REQUIREMENT.	Source: JCAPS 2.1 (IER_ID, EXCN_ND_LN_REQ_ID, MESSAGE_ID).	
INTEROPERABILITY-REQUIREMENT	INTEROPERABILITY-REQUIREMENT Category Code	INOP_REQ_EQ_cat_cd	Code_smallint	smallint	NULL	No	No	The code that designates a classification of REQUIREMENT for architectures.	1--Activity Model; 2--Data Model; 3--Exchange Need Line; 4--Information Exchange Requirement; 5--Operational Concept; 6--Usage Requirement; 8--Not Specified; 9--Not Known.	
INTEROPERABILITY-REQUIREMENT	INTEROPERABILITY-REQUIREMENT Class Code	INOP_REQ_EQ_cls_cd	String	varchar(2)	NULL	No	No	The code that indicates the area of application of a specific REQUIREMENT.	D--Deployment; F--Force Structure; M--Modernization; O--Military Operations; R--Readiness; SP--Support; SU--Sustainability; U--Usage Requirement [SAASE]; N--Not specified; X--Not known.	
INTEROPERABILITY-REQUIREMENT-TASK	Interop Req GUIDANCE Identifier	InteropReq_GUID_id	Id(int)	int	NOT NULL	Yes	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.		
INTEROPERABILITY-REQUIREMENT-TASK	INTEROPERABILITY-REQUIREMENT-TASK Identifier	INOP_REQ_EQ_TASK_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a REQUIREMENT-TASK for a specific REQUIREMENT and a specific TASK.		

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
INTEROPERABILITY- REQUIREMENT-TASK	INTEROPERABILITY-TASK ROLE CODE	INOP_R EQ_TSK _rl_cd	Code_ smallint	smallint	NULL	No	No	The code that designates the specific way in which a TASK is cited for a REQUIREMENT.	1--Specifies; 2--Supports; 3--Applies to; 4--Is satisfied by; 8--Not specified; 9--Not known.
INTEROPERABILITY- REQUIREMENT-TASK	TASK IDENTIFIER	TSK_id	Id(int)	int	NOT NULL	Yes	Yes	(9282) (A) THE IDENTIFIER THAT REPRESENTS A TASK.	
MATERIEL (ASA, C2 Core)	MATERIEL Alias Name	MAT_alias_nm	Name	varchar(50)	NULL	No	No	The surrogate name used for a specific MATERIEL.	
MATERIEL (ASA, C2 Core)	MATERIEL ALTERNATE IDENTIFIER	MAT_alt_id	String	varchar(35)	NULL	No	No	(11223) (A) THE IDENTIFIER THAT REPRESENTS, ALTERNATIVELY, A SPECIFIC INSTANCE OF MATERIEL.	
MATERIEL (ASA, C2 Core)	MATERIEL Alternate Identifier Source Name	MAT_alt_id_src_nm	Name	varchar(50)	NULL	No	No	The name of the origin of the alternate identifier for a specific MATERIEL.	
MATERIEL (ASA, C2 Core)	MATERIEL CATEGORY CODE	MAT_cat_cd	Code_ smallint	smallint	NULL	No	No	(11222/1) (A) THE CODE THAT DENOTES THE CLASS OF A SPECIFIC MATERIEL. (33486/2) (C) THE CODE WHICH DENOTES A SPECIFIC MATERIEL CLASSIFICATION.	For DDDS #11222: 01--VEHICLE; 02--WEAPON; 03--MUNITION; 04--SENSOR; 05--SUPPLY. For DDDS #33486: None listed in DDDS.
MATERIEL (ASA, C2 Core)	MATERIEL Contractor- Assigned Government Entity Code	MAT_cage_cd	String	varchar(4)	NULL	No	Yes	The code maintained under the Contractor- Assigned Government Entity (CAGE) program for a specific MATERIEL.	Domain be provided by PEO-C3S. Formerly named ARMY-MATERIEL-ITEM Contractor- Assigned Government Entity Code.
MATERIEL (ASA, C2 Core)	MATERIEL FRIEND FOE CODE	MAT_frn_d_foe_cd	Code_ smallint	smallint	NULL	No	No	(11224) (A) THE CODE THAT DENOTES WHETHER A SPECIFIC MATERIEL IS FRIENDLY.	1--FRIEND; 2--FOE; 3--NOT KNOWN; 4--NEUTRAL; 5--NOT SPECIFIED. (DDDS, approved)
MATERIEL (ASA, C2 Core)	MATERIEL IDENTIFIER	MAT_id	Id(int)	int	NOT NULL	Yes	No	(11182) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC INSTANCE OF MATERIEL.	
MATERIEL (ASA, C2 Core)	MATERIEL Lot Identifier	MAT_lot_id	String	varchar(4)	NULL	No	No	The identifier assigned to represent a specific production of the MATERIEL-ITEM to which the MATERIEL belongs. Source: Fire Support Data Model, August 1993; JCDB July 2000.	The lot number would be used to specify a lot of propellant or other munition.
MATERIEL (ASA, C2 Core)	MATERIEL Part Number Identifier	MAT_part_no_id	String	varchar(50)	NULL	No	Yes	The identifier assigned as a part number for a specific MATERIEL.	
MATERIEL (ASA, C2 Core)	MATERIEL Serial Number Identifier	MAT_ser_nmbr_id	String	varchar(50)	NULL	No	No	The identifier that represents the serial number inscribed on or otherwise associated to a specific MATERIEL. Source: JCDB July 2000.	
MATERIEL (ASA, C2 Core)	MATERIEL-ITEM IDENTIFIER	MAT_id	Id(int)	int	NULL	No	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	
MATERIEL-ASSOCIATION (ASA, C2 Core)	ARCHITECTURE Identifier	ARCH_id	Id(int)	int	NULL	No	Yes	The identifier of a specific ARCHITECTURE.	
MATERIEL-ASSOCIATION (ASA, C2 Core)	MATERIEL-ASSOCIATION IDENTIFIER	MATA_id	Id(int)	int	NOT NULL	Yes	No	(11313) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC MATERIEL-ASSOCIATION.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
MATERIEL-ASSOCIATION {ASA, C2 Core}	MATERIEL-ASSOCIATION TYPE CODE	MAT_ty_cd	Code_smallint	smallint	NULL	No	No	(11316) (A) THE CODE THAT DENOTES THE CLASS OF ASSOCIATION OF A SPECIFIC MATERIEL WITH ANOTHER SPECIFIC MATERIEL.	01--IS A COMPONENT OF; 02--IS A PART FOR; 03--IS CONTAINED IN; 04--S CONSUMED BY; 05--IS PROTECTED BY. (DDDS, approved) [2-character (max) string] Added for Army CADM: 8--Not specified; 9--Not known.
MATERIEL-ASSOCIATION {ASA, C2 Core}	ORDINATE MATERIEL IDENTIFIER	Ord_MA_T_id	Id(int)	int	NOT NULL	Yes	Yes	(11182) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC INSTANCE OF MATERIEL.	
MATERIEL-ASSOCIATION {ASA, C2 Core}	SUBORDINATE MATERIEL IDENTIFIER	Sub_MA_T_id	Id(int)	int	NOT NULL	Yes	Yes	(11182) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC INSTANCE OF MATERIEL.	
MATERIEL-ITEM	ICON-CATALOG Identifier	ICONCA_T_id	Id(int)	int	NULL	No	Yes	The identifier of a specific instance of ICON-CATALOG.	
MATERIEL-ITEM	MATERIEL-ITEM Alternate Identifier	MATL_alt_id	String	varchar(20)	NULL	No	No	The surrogate identifier of a specific MATERIEL-ITEM (Army CADM).	Formerly named ARMY-MATERIEL-ITEM Alternate Identifier.
MATERIEL-ITEM	MATERIEL-ITEM Alternate Identifier	MATL_alt_id_src_nm	String	varchar(20)	NULL	No	No	The name of the originator of the MATERIEL-ITEM Alternate Identifier (Army CADM).	
MATERIEL-ITEM	MATERIEL-ITEM Source Name	MATL_alt_nm	String	varchar(250)	NULL	No	No	The surrogate name of a specific MATERIEL-ITEM (Army CADM).	Formerly named ARMY-MATERIEL-ITEM Alternate Name.
MATERIEL-ITEM	MATERIEL-ITEM CONTROL NUMBER TYPE CODE	MATL_CN_NM_T_Y_CD	Code_smallint	smallint	NULL	No	No	(10901/4) (A) THE CODE THAT REPRESENTS A MATERIEL-ITEM CONTROL NUMBER. 1 = ITEM IS IDENTIFIED IN ACCORDANCE WITH THE FEDERAL CATALOGING SYSTEM UNDER AUTHORITY OF DOD.; 2 = ITEM IS IDENTIFIED AS A DOCUMENT.; 3 = ARMY EQUIPMENT LINE ITEM (LIN); 4 = AUTHORIZATION MATERIEL ITEM; 5 = NATIONAL STOCK NUMBER; 6 = NATO STOCK NUMBER; 7 = LOCAL STOCK NUMBER; 8 = REFERENCE NUMBER (CAGE MANUFACTURER + PART NUMBER); 9 = PLAN EQUIPMENT NUMBER; Z = ITEM IS NOT FURTHER CLASSIFIED. (DDDS, September 2000)	
MATERIEL-ITEM	MATERIEL-ITEM DESCRIPTION TEXT	MATL_desc_tx	Text(8000)	varchar(8000)	NULL	No	No	(30111/1) (A) THE TEXT THAT DESCRIBES THE MATERIEL-ITEM.	
MATERIEL-ITEM	MATERIEL-ITEM FEDERAL SUPPLY SCHEDULE IDENTIFIER	MATL_fedplsch_id	String	varchar(5)	NULL	No	No	(10905) (A) THE IDENTIFIER THAT REPRESENTS THE SPECIFIC GENERAL SERVICE AGENCY SCHEDULE ON WHICH THIS ITEM APPEARS.	
MATERIEL-ITEM	MATERIEL-ITEM IDENTIFIER	MATL_id	Id(int)	int	NOT NULL	Yes	No	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	
MATERIEL-ITEM	MATERIEL-ITEM NAME	MATL_nm	Name	varchar(50)	NULL	No	No	(19682) (A) THE COMMON USAGE NAME OF A MATERIEL-ITEM EXPRESSED AS A NOUN OR A NOUN PHRASE.	
MATERIEL-ITEM	MATERIEL-ITEM Nomenclature Name	MATL_nomencl_nm	Text(255)	varchar(255)	NULL	No	No	The name providing the complete entry for the DoD standard military naming system for a specific MATERIEL-ITEM. Source: PEO-C3S/FIO (Army CADM, June 1998).	Formerly named ARMY-MATERIEL-ITEM Nomenclature Name.

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
MATERIEL-ITEM	MATERIEL-ITEM Peak Power Quantity	MATL_pk_power_qty	Number	int	NULL	No	No	The maximum electrical current demanded under operation of a specific MATERIEL-ITEM.	Unit is watts.
MATERIEL-ITEM	MATERIEL-ITEM REFERENCE NUMBER IDENTIFIER	MATL_ref_nr_id	String	varchar(32)	NULL	No	No	(10553) (A) THE IDENTIFIER WHICH RELATES THE MATERIEL-ITEM TO THE MANUFACTURER'S STOCK IDENTITY.	
MATERIEL-ITEM	MATERIEL-ITEM Short Name	MATL_ShortNm	String	varchar(10)	NULL	No	No	The name, in abbreviated format, of the MATERIEL-ITEM (Army CADM).	Formerly named ARMY-MATERIEL-ITEM Short Name. Source C4RDP Materiel-Line-Item Short Name.
MATERIEL-ITEM	MATERIEL-ITEM Software Indicator Code	MATL_sw_ind_cd	Code_smallint	smallint	NULL	No	No	The code that denotes that the MATERIEL-ITEM has software characteristics.	1--True, Software characteristics apply; 2--False, No software characteristics apply; 8--Not specified; 9--Not known.
MATERIEL-ITEM	MATERIEL-ITEM Stock Number Identifier	MATL_stock_nr_id	String	varchar(6)	NULL	No	No	The number that represents the specific general service agency schedule for a specific country and item catalog identifier for which the item appears. Note: The Army CADM will use the NATO Stock Number (NSN), with the form NNNN-MM-KKKKKK, where NNNN is the federal supply class, MM denotes the country, and KKKKKK is a meaningless identifier..	Formerly named ARMY-MATERIEL-ITEM Stock Number Identifier.
MATERIEL-ITEM	MATERIEL-ITEM TYPE CODE	MATL_ty_cd	Code_smallint	smallint	NULL	No	No	(15367) (A) THE CODE THAT REPRESENTS A SPECIFIC KIND OF MATERIEL-ITEM.	01--VEHICLE-TYPE; 02--WEAPON-TYPE; 03--MUNITION-TYPE; 04--SENSOR-TYPE; 05--AIRCRAFT-TYPE; 06--ANTENNA-TYPE; 07--CONSUMABLE-MATERIEL-TYPE; 08--COUNTERMEASURES-SYSTEM-TYPE; 09--ELECTRICAL-SYSTEM-TYPE; 10--ELECTRO-OPTICAL-SYSTEM-TYPE; 11--ELECTRONIC-SYSTEM-TYPE; 12--EQUIPMENT-TYPE; 13--LAUNCHER-TYPE; 14--LIFTING-DEVICE-TYPE; 15--PROPULSION-SYSTEM-COMPONENT-TYPE; 16--RADIO-FREQUENCY-EQUIPMENT-TYPE; 17--SHIP-TYPE [DDDS]; Added for CADM 2.0: 18--Platform (not otherwise specified). [2--character (max) string] Added for Army CADM: 98--Not specified; 99--Not known.
MATERIEL-ITEM-ASSOCIATION	MATERIEL-ITEM-ASSOCIATION Identifier	MATL_AS_SOC_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a MATERIEL-ITEM and a specific Subordinate MATERIEL-ITEM.	
MATERIEL-ITEM-ASSOCIATION	MATERIEL-ITEM-ASSOCIATION Role Code	MATL_AS_SOC_role_cd	Code_smallint	smallint	NULL	No	No	The code the represents the way in which the Ordinate MATERIEL-ITEM is related to the Subordinate MATERIEL-ITEM.	1 = Ordinate MATERIEL-ITEM is superceded by Subordinate MATERIEL-ITEM; 2 = Ordinate MATERIEL-ITEM is an example or subset of Subordinate MATERIEL-ITEM; 3 = Ordinate MATERIEL-ITEM is the same as the Subordinate MATERIEL-ITEM; 8 = Not specified; 9 = Not known.
MATERIEL-ITEM-ASSOCIATION	Ordinate MATERIEL-ITEM Identifier	Ord_MATL_id	Id(int)	int	NOT NULL	Yes	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	
MATERIEL-ITEM-ASSOCIATION	Subordinate MATERIEL-ITEM Identifier	Sub_MATL_id	Id(int)	int	NOT NULL	Yes	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
MATERIEL-ITEM-CAPABILITY-NORM	CAPABILITY IDENTIFIER	CAP_id	Id(int)	int	NOT NULL	Yes	Yes	(11287) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC CAPABILITY.	The following instances of CAPABILITY are needed: Mean Time Between Failures, Mean Time Between Software Faults; Availability; System Initialization Time; Data Transfer Rate; Program Restart Time; Data Throughput/Capacity; Input Type Response Time; Operator Interaction Type Response Time. [10-character (max) string]
MATERIEL-ITEM-CAPABILITY-NORM	MATERIEL-ITEM IDENTIFIER	MATI_id	Id(int)	int	NOT NULL	Yes	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	
MATERIEL-ITEM-CAPABILITY-NORM	MATERIEL-ITEM-CAP-NORM Measurement Unit	MCN_meas_un_qy	Number, Real	float	NULL	No	No	(11467/2) (A) THE QUANTITY OF INCREMENTAL UNITS BY WHICH THE PERFORMANCE OF A CAPABILITY IS MEASURED THAT IS SPECIFIED TO BE ATTAINABLE BY A SPECIFIC MATERIEL-ITEM.	
MATERIEL-ITEM-CAPABILITY-NORM	MATERIEL-ITEM-CAP-NORM Performance Threshold	MCN_perf_thrsld_qy	Number, Real	float	NULL	No	No	The quantity of incremental units that represents a level of a CAPABILITY that should be achieved.	
MATERIEL-ITEM-COST	COST-BASIS Identifier	CSTBAS_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific COST-BASIS.	
MATERIEL-ITEM-COST	MATERIEL-ITEM IDENTIFIER	MATI_id	Id(int)	int	NOT NULL	Yes	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	
MATERIEL-ITEM-COST	MATERIEL-ITEM-COST Amount	MATL_COST_amt	Money	money	NULL	No	No	The amount that represents the estimated acquisition cost of a unit of a MATERIEL-ITEM.	
MATERIEL-ITEM-COST	MATERIEL-ITEM-COST Identifier	MATL_COST_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a specific MATERIEL-ITEM-COST for a specific MATERIEL-ITEM.	
MATERIEL-ITEM-COST	MATERIEL-ITEM-COST Measure Unit Code	MATL_COST_meas_un_cd	Code, small integer	smallint	NULL	No	No	The code that denotes the unit of measure for the quantity to which a specific MATERIEL-ITEM-COST applies. known.	1--EA (each); 2--FT (linear foot); 3--LOT; 4--LN (each line to be connected); 5--KW (kilowatts); 6--HVAC TON (2000 BTUs); 7--SF (square feet); 8--Per pair; 9--Per 10,000 outside plant sq ft; 10--Each 1,000-ft wire pair; 11--Each 2,000-ft strand; 98--Not specified; 99--Not known.
MEASURED-ELEVATION-POINT	LOCATION IDENTIFIER	LOC_id	Id(int)	int	NOT NULL	Yes	Yes	(11893) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC LOCATION.	
MEASURED-ELEVATION-POINT	MEASURED-ELEVATION-POINT ELEVATION DIMENSION	MEP_elevation_dm	Number, Real	float	NULL	No	No	(10504) (A) THE ELEVATION OF A POINT ABOVE OR BELOW THE VERTICAL DATUM AS DEFINED IN THE WORLD GEODETIC SYSTEM 1984 (WGS 84).	Units of METERS.
MEASURED-ELEVATION-POINT	MEASURED-ELEVATION-POINT PRECISION QUANTITY	MEP_precision_qy	Number, Real	real	NULL	No	No	(11924) (A) A QUANTITY OF ERROR BOUNDS FOR A SPECIFIC MEASURED-ELEVATION-POINT AT THE 90% CONFIDENCE LEVEL FOR THE GIVEN ELEVATION.	Units of METERS.

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
MESSAGE-STANDARD	MESSAGE-STANDARD Format Code {ASA}	MSG_STD_fmt_cd	Code_smallint	smallint	NULL	No	No	The code that identifies the MESSAGE-STANDARD format. An example is USMTF, VMF. Source: Army Systems Architecture Data Model.	Example domain values: 01--US Message Text Format; 02--US Variable Message Format; 03--TADIL A; 04--TADIL B; 05--TADIL C; 06--TADIL J; 07--Other US Tactical Data Link; 08--Link 11; 09--Link 16; 10--Other NATO Tactical Data Link; 11--NATO ADatP-3 Message Format; 12--NATO AintP-3 Message Format; 13--NATO AGeOP-3 Message Format; 14--Other NATO Message Format; 15--Other NATO; 16--Other multinational; 17--Intelligence-specific format; 18--Modeling-and-simulation-specific format; 19--Plain text; 20--Binary not otherwise specified; 98--Not Specified; 99--Not known.
MESSAGE-STANDARD	MESSAGE-STANDARD Last Revision Date {ASA}	MSG_STD_rev_dt	DateTime	datetime	NULL	No	No	The date of last change of the MESSAGE-STANDARD as approved for information system usage. Source: Army Systems Architecture Data Model.	
MESSAGE-STANDARD	MESSAGE-STANDARD Reference identifier {ASA}	MSG_STD_ref_id	Id(int)	int	NULL	No	No	The identifier of the MESSAGE-STANDARD as cited for its message set. Source: Army Systems Architecture Data Model.	
MESSAGE-STANDARD	MESSAGE-STANDARD Short Name {ASA}	MSG_STD_shrt_nm	Name	varchar(50)	NULL	No	No	The abbreviated name of the MESSAGE-STANDARD. Source: Army Systems Architecture Data Model.	
MESSAGE-STANDARD	Standard AGREEMENT Identifier	Msg_Std_AGR_id	Id(int)	int	NOT NULL	Yes	Yes	(12495) (A) THE IDENTIFIER THAT REPRESENTS AN AGREEMENT.	
MESSAGE-STANDARD-INFORMATION-ELEMENT	INFO-ELEMENT IDENTIFIER	IE_id	Id(int)	int	NOT NULL	Yes	Yes	(29164) (A) THE IDENTIFIER THAT REPRESENTS AN ICOM.	
MESSAGE-STANDARD-INFORMATION-ELEMENT	Standard AGREEMENT Identifier	Msg_Std_AGR_id	Id(int)	int	NOT NULL	Yes	Yes	(12495) (A) THE IDENTIFIER THAT REPRESENTS AN AGREEMENT.	
MISSION	MISSION Abbreviated Name	MSN_ab_brev_nm	Name	varchar(50)	NULL	No	No	The shortened name of a specific MISSION.	
MISSION	MISSION CATEGORY CODE	MSN_CAT_CD	Code_smallint	smallint	NULL	No	No	(42142/1) (A) THE CODE THAT DENOTES THE CLASS OF A MISSION.	01 = AIR MISSION; 02 = SURFACE MISSION. (DDDS, 10 August 2000)
MISSION	MISSION CLASSIFICATION CODE	MSN_CL_ASS_CD	String	char(4)	NULL	No	No	(44802/1) (A) THE CODE THAT REPRESENTS THE MISSION SPECIALTY OF A MILITARY-UNIT.	0001 = ADMINISTRATIVE, REPLACEMENT HOLDING UNIT; 0002 = ADMINISTRATIVE AIR LIAISON; 0003 = ADMINISTRATIVE LEGAL SERVICES; 0004 = ADMINISTRATIVE, FINANCE; 0005 = ADMINISTRATIVE, JUDGE ADVOCATE GENERAL; 0006 = ADMINISTRATIVE, LABOR; 0007 = ADMINISTRATIVE, METEOROLOGICAL; 0008 = ADMINISTRATIVE, MORALWELFARE/RECREATION; 0009 = ADMINISTRATIVE, MORTUARY/GRAVES REGISTRY; 0010 = ADMINISTRATIVE, PERSONNEL SERVICES; 0011 = ADMINISTRATIVE, POSTAL; 0012 = ADMINISTRATIVE, PUBLIC AFFAIRS; 0013 = ADMINISTRATIVE, PUBLIC AFFAIRS BROADCAST; 0014 = ADMINISTRATIVE, PUBLIC AFFAIRS, JOINT INFORMATION BUREAU; 0015 =

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
								ADMINISTRATIVE, QUARTERMASTER SUPPLY; 0016 = ADMINISTRATIVE, RELIGIOUS/CHAPLAIN; 0017 = AIR BASE GROUP; 0018 = AIR DEFENSE MISSILE AND ARTILLERY; 0019 = AIR DEFENSE MISSILE, HEAVY; 0020 = AIR DEFENSE MISSILE, LIGHT; 0021 = AIR DEFENSE MISSILE, MEDIUM; 0022 = AIR DEFENSE, GUN; 0023 = AIR DEFENSE, TARGETING; 0024 = AIR DEFENSE, THEATER MISSILE DEFENSE; 0025 = AIR LIAISON/UTILITY OPERATIONS; 0026 = AIR TRAFFIC CONTROL, AIR TRAFFIC CONTROLLER (ATC); 0027 = AIR TRAFFIC CONTROL, GENERAL; 0028 = AIR TRAFFIC CONTROL, GROUND CONTROL APPROACH; 0029 = AIR TRAFFIC CONTROL, GROUND CONTROL INTERCEPT; 0030 = AIR TRAFFIC CONTROL, NAVIGATIONAL AIR; 0031 = AIR TRAFFIC CONTROL, TACTICAL AIR CONTROLLER; 0032 = AIR TRAFFIC CONTROL, TOWER CONTROL; 0033 = AIRBORNE COMMAND POST; 0034 = AIRBORNE COMMANDO OPERATIONS; 0035 = AIRBORNE PLATFORM COLLECTION, SIGINT; 0036 = AIRBORNE PLATFORM JAMMING (ALL TYPES); 0037 = AIRBORNE PLATFORM JAMMING RADAR; 0038 = AIRBORNE PLATFORM RADIO RELAY (RADREL); 0039 = AIRBORNE PLATFORM, COLLECTION (ALL TYPES); 0040 = AIRBORNE PLATFORM, COLLECTION IMINT; 0041 = AIRBORNE PLATFORM, GENERAL; 0042 = AIRCRAFT CARRIERS; 0043 = AIRCRAFT CONTROL/WARNING; 0044 = AIRCRAFT, LONG RANGE; 0045 = AIRCRAFT, TACTICAL; 0046 = AMPHIBIOUS WARFARE CRAFT; 0047 = AMPHIBIOUS WARFARE SHIPS; 0048 = ANALYSIS CONTROL AND WARNING; 0049 = ANTI-ARMOR, AIR ASSAULT; 0050 = ANTI-ARMOR, AIRBORNE; 0051 = ANTI-ARMOR, ARCTIC; 0052 = ANTI-ARMOR, ARMORED; 0053 = ANTI-ARMOR, DISMOUNTED; 0054 = ANTI-ARMOR, LIGHT; 0055 = ANTI-ARMOR, MOTORIZED; 0056 = ANTI-ARMOR, MOUNTAIN; 0057 = ANTI-SUBMARINE WARFARE (ASW), SURFACE; 0058 = ARCHITECTURE, NAVAL; 0059 = ARTILLERY, MULTI-ROCKET LAUNCHER; 0060 = ARMOR, AIR-ASSAULT; 0061 = ARMOR, AIRBORNE; 0062 = ARMOR, AMPHIBIOUS; 0063 = ARMOR, HEAVY; 0064 = ARMOR, LIGHT; 0065 = ARMOR, MEDIUM; 0066 = ARMOR, RECOVERY; 0067 = ARTILLERY, COASTAL DEFENSE; 0068 = ARTILLERY, ANTITANK; 0069 = ARTILLERY, FIELD/MISSILE; 0070 = ARTILLERY, FIELD (BOTH SELF-PROPELLED AND TOWED); 0071 = ARTILLERY, GUN-HOWITZER; 0072 = ARTILLERY, GUN; 0073 = ARTILLERY, GUN-HOWITZER; 0074 = ARTILLERY, GUN-HOWITZER, AIR-ASSAULT; 0075 = ARTILLERY, GUN-HOWITZER, AIRBORNE; 0076 = ARTILLERY, GUN-HOWITZER, AMPHIBIOUS; 0077 = ARTILLERY, GUN-HOWITZER, ARCTIC; 0078 = ARTILLERY, GUN-HOWITZER, HEAVY; 0079 = ARTILLERY, GUN-HOWITZER, LIGHT; 0080 = ARTILLERY, GUN-HOWITZER, MEDIUM; 0081 = ARTILLERY, GUN-HOWITZER, MOUNTAIN; 0082 = ARTILLERY, HOWITZER; 0083 = ARTILLERY, METEOROLOGICAL; 0084 = ARTILLERY, METEOROLOGICAL, AIR ASSAULT; 0085 = ARTILLERY, METEOROLOGICAL, AIRBORNE; 0086 = ARTILLERY, METEOROLOGICAL, LIGHT; 0087 = ARTILLERY, METEOROLOGICAL, MOUNTAIN; 0088 = ARTILLERY, MORTAR; 0089 = ARTILLERY, MORTAR, AIR ASSAULT; 0090 = ARTILLERY, MORTAR, AIRBORNE; 0091 = ARTILLERY, MORTAR, AMPHIBIOUS; 0092 = ARTILLERY, MORTAR, ARCTIC; 0093 = ARTILLERY,	

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Annex M (Proposed Attribute Specifications)

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Proposed JCAPS View of the CADM

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
								<p>MORTAR, MOUNTAIN; 0094 = ARTILLERY, RECOILLESS RIFLE; 0095 = ARTILLERY, SELF PROPELLED; 0096 = ARTILLERY, SHORT RANGE TACTICAL ROCKETS/MSLS; 0097 = ARTILLERY, SURVEY, AIR ASSAULT; 0098 = ARTILLERY, SURVEY, AIRBORNE; 0099 = ARTILLERY, SURVEY, LIGHT; 0100 = ARTILLERY, SURVEY, MOUNTAIN; 0101 = ARTILLERY, TARGET ACQUISITION; 0102 = ARTILLERY, TARGET ACQUISITION COLT/FIST; 0103 = ARTILLERY, TARGET ACQUISITION FLASH (OPTICAL); 0104 = ARTILLERY, TARGET ACQUISITION RADAR; 0105 = ARTILLERY, TARGET ACQUISITION SOUND; 0106 = ARTILLERY, TOWED; 0107 = AVIATION HELICOPTER ATTACK; 0108 = AVIATION HELICOPTER, UTILITY; 0109 = AVIATION, CIVILIAN; 0110 = AVIATION, COMPOSITE; 0111 = AVIATION, FIXED-WING; 0112 = AVIATION, FIXED-WING, ATTACK; 0113 = AVIATION, FIXED-WING, RECON; 0114 = AVIATION, FIXED-WING, UTILITY; 0115 = AVIATION, HELICOPTER, AIR BORDER PATROL; 0116 = AVIATION, HELICOPTER, ANTI-SUBMARINE WARFARE (ASW); 0117 = AVIATION, HELICOPTER, C2 (COMMAND AND CONTROL); 0118 = AVIATION, HELICOPTER, COMBAT; 0119 = AVIATION, HELICOPTER, GENERAL; 0120 = AVIATION, HELICOPTER, MEDIVAC; 0121 = AVIATION, HELICOPTER, MINE COUNTERMEASURE; 0122 = AVIATION, HELICOPTER, SCOUT; 0124 = AVIATION, HELICOPTER, TRANSPORT; 0125 = AVIATION, HELICOPTER, UTILITY, LIGHT; 0127 = AVIATION, HELICOPTER, UTILITY, MEDIUM; 0128 = AVIATION, SEARCH AND RESCUE; 0129 = AVIATION, UNMANNED AERIAL VEHICLE; 0130 = AVIATION, VERTICAL/SHORT TAKEOFF & LANDING (V/STOL); 0131 = BASES, AMPHIBIOUS FORCE; 0132 = BASES, AUXILIARY SHIPS; 0133 = BASES, CRUISER-DESTROYER FORCE; 0134 = BASES, DEFENSE FORCE; 0135 = BASES, GUIDED MISSILE PATROL BOATS; 0136 = BASES, MOTOR TORPEDO BOAT; 0137 = BASES, NAVAL COASTAL DEFENSE FORCE; 0138 = BASES, PRIMARY DEFENSE FORCE; 0139 = BASES, RESERVE SHIPS; 0140 = BASES, SUBMARINE, FORCE; 0141 = BASES, SUBMARINE, MAINTENANCE; 0142 = BASES, SUBMARINE, MISSILE ARMED; 0143 = BASES, SUBMARINE, MISSILE LOADING; 0144 = BASES, SUBMARINE, NON-MISSILE ARMED; 0145 = BASES, SUBMARINE, NUCLEAR REACTOR MAINTENANCE; 0146 = BICYCLE INFANTRY; 0147 = BOMBARDMENT, STRATEGIC; 0148 = BOMBARDMENT, TACTICAL; 0149 = BOMBER, GENERAL; 0150 = BOMBER, STRATEGIC; 0151 = BOMBER, TACTICAL; 0152 = CAVALRY; 0153 = CAVALRY, AIR; 0154 = CBR (CHEMICAL-BIOLOGICAL-RADIOLOGICAL); 0155 = CBR, BIOLOGICAL DECONTAMINATION; 0156 = CBR, CHEMICAL AGENTS; 0157 = CBR, CHEMICAL DECONTAMINATION; 0158 = CBR, CHEMICAL SMOKE, ARMOR; 0159 = CBR, CHEMICAL SMOKE/DECONTAMINATION; 0160 = CBR, DECONTAMINATION; 0161 = CBR, DISPOSAL; 0162 = CBR, RADIOLOGICAL; 0163 = CBR, SMOKE GENERATION; 0164 = CBR, TOXIC GAS; 0165 = CEREMONIAL; 0166 = CEREMONIAL PRIMARY MISSION; 0167 = CHEMICAL/BIOLOGICAL/NUCLEAR PRIMARY MISSION; 0168 = CHEMICAL, BIOLOGICAL, NUCLEAR AGENTS; 0169 = CIVIL DEFENSE PRIMARY MISSION; 0170 = CIVIL</p>	

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Proposed JCAPS View of the CADM

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
								EVACUATION; 0171 = COASTAL DEFENSE, GENERAL; 0172 = COASTAL DEFENSE, SEABORNE WEAPONS; 0173 = COASTAL DEFENSE, SURVEILLANCE; 0174 = COASTAL DEFENSE, WEAPONS; 0175 = COMBAT AIR CONTROL, CLOSE, COMBAT CONTROL GROUP; 0176 = COMBAT AIR CONTROL, CLOSE, FORWARD AIR CONTROL; 0177 = COMBAT AIR CONTROL, CLOSE, GENERAL; 0178 = COMBAT AIR CONTROL, CLOSE, OPERATIONS GROUP; 0179 = COMBAT AIR CONTROL, CLOSE, RADIO NAVIGATIONAL POINT; 0180 = COMBAT AIR CONTROL, CLOSE, VECTORING-TARGET POINT; 0181 = COMBAT ENGINEERS, ARMORED; 0182 = COMBAT ENGINEERS, BARRIER/BREACH; 0183 = COMBAT ENGINEERS, GENERAL; 0184 = COMBATANT PATROL CRAFT; 0185 = COMBINED ARMS; 0186 = COMMAND POST, COMBINED; 0187 = COMMAND POST, FIGHTER; 0188 = COMMAND POST, SAM BRIGADE; 0189 = COMMAND POST, SAM REGIMENT; 0190 = COMMAND-CONTROL HEADQUARTERS AIR FORCE; 0191 = COMMAND-CONTROL HEADQUARTERS AIR FORCE COMMAND POST; 0192 = COMMAND-CONTROL HEADQUARTERS ALTERNATE COMMAND POST; 0193 = COMMAND-CONTROL HEADQUARTERS ARMY; 0194 = COMMAND-CONTROL HEADQUARTERS ARMY COMMAND POST; 0195 = COMMAND-CONTROL HEADQUARTERS, ADMINISTRATION; 0196 = COMMAND-CONTROL HEADQUARTERS, AIR DEFENSE; 0197 = COMMAND-CONTROL HEADQUARTERS, AIR DEFENSE COMMAND POST; 0198 = COMMAND-CONTROL HEADQUARTERS, AIRBORNE COMMAND POST; 0199 = COMMAND-CONTROL HEADQUARTERS, ALTERNATE; 0200 = COMMAND-CONTROL HEADQUARTERS, COMBINED AIR, AIR DEFENSE COMMAND; 0201 = COMMAND-CONTROL HEADQUARTERS, FORWARD COMMAND POST; 0202 = COMMAND-CONTROL HEADQUARTERS, GENERAL; 0203 = COMMAND-CONTROL HEADQUARTERS, INDEPENDENT; 0204 = COMMAND-CONTROL HEADQUARTERS, MAIN COMMAND POST (MCP); 0206 = COMMAND-CONTROL HEADQUARTERS, NAVY; 0207 = COMMAND-CONTROL HEADQUARTERS, REAR COMMAND POST (RCPI); 0208 = COMMAND-CONTROL HEADQUARTERS, SEABORNE COMMAND POST; 0209 = COMMAND-CONTROL HEADQUARTERS, STRATEGIC ROCKET FORCES; 0210 = COMMAND-CONTROL HEADQUARTERS, TACTICAL MISSILES; 0211 = COMMAND-CONTROL HEADQUARTERS, TRAINBORNE COMMAND POST; 0212 = COMMUNICATIONS JAMMING COUNTERMEASURES; 0213 = COMMUNICATIONS SATELLITES; 0214 = COMMUNICATIONS, AIRBORNE RADIO RELAY; 0215 = COMMUNICATIONS/LIAISON; 0216 = CONSTRUCTION, AIRFIELD; 0217 = CONSTRUCTION, BRIDGE; 0218 = CONSTRUCTION, GENERAL; 0219 = CONSTRUCTION, GEODETIC SURVEY; 0220 = CONSTRUCTION, PIPELINE; 0221 = CONSTRUCTION, RAILROAD; 0222 = CONSTRUCTION, ROAD; 0223 = CONSTRUCTION, SIGNAL; 0224 = CONSTRUCTION/REPAIR, NAVAL; 0225 = COUNTERMEASURES, ESM/SIGINT/ECM MISSION; 0226 = COUNTERMEASURES, MINE; 0227 = DAMAGE RECOVERY; 0228 = DECEPTION, COUNTERMEASURES (COMMUNICATIONS); 0229 = DECEPTION,	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
								<p>COUNTERMEASURES (GENERAL); 0230 = DECEPTION, COUNTERMEASURES (NONCOMMUNICATIONS); 0231 = DECEPTION, COUNTERMEASURES (OTHER); 0232 = DECEPTION, FOREIGN INSTRUMENTATION SIGNALS; 0233 = DEFENSE, CIVIL; 0234 = DIPLOMATIC, CONSULATE; 0235 = DIPLOMATIC, EMBASSY; 0236 = DIPLOMATIC, GENERAL; 0237 = DIPLOMATIC, MISSION; 0238 = EARLY WARNING RADAR, 0239 = EARLY WARNING RADAR, AIRBORNE; 0240 = EARLY WARNING, EARLY WARNING RADAR, AIRBORNE; 0241 = ELECTRONIC SUPPORT MEASURES (ESM) GENERAL; 0242 = ELECTRONIC WARFARE; 0243 = SUPPORT, GENERAL; 0244 = ELECTRONIC WARFARE; 0245 = ELECTRONIC WARFARE (EW) MSN, GEN, NO FURTHER SPECIALTY; 0246 = ELECTRONIC WARFARE (EW) MSN, MULTIPLE FUNCTION; 0247 = ELECTRONIC WARFARE PRIMARY MISSION; 0248 = ENGINEER ENGINEER PRIMARY MISSION (COMBATANT); 0249 = ENGINEER PRIMARY MISSION (NON-COMBATANT); 0250 = ENGINEERING, COMBAT, AIR ASSAULT; 0251 = ENGINEERING, COMBAT, ARCTIC; 0252 = ENGINEERING, COMBAT, HEAVY; 0253 = ENGINEERING, COMBAT, LIGHT (SAPPER); 0254 = ENGINEERING, COMBAT, MOUNTAIN; 0255 = ENGINEERING, COMBAT, RECON; 0256 = ENGINEERING, CONSTRUCTION; 0257 = ENGINEERING, NAVAL GENERAL; 0258 = ENGINEERING, NAVAL, CONSTRUCTION; 0259 = ENGINEERS, COMBAT; 0260 = ENGINEERS, NON-COMBATANT; 0261 = FIELD ARTILLERY PRIMARY MISSION; 0262 = FIGHTER DIRECTION POST; 0263 = FIGHTER, AIR SUPERIORITY; 0264 = FIGHTER, CLOSE AIR SUPPORT-GROUND ATTACK; 0265 = FIGHTER, COMBINED; 0266 = FIGHTER, GENERAL; 0267 = FIRE FIGHTING; 0268 = FISHERIES PATROL; 0269 = FLEET SUPPORT SHIPS; 0270 = FOREIGN INSTRUMENTATION SIGNALS JAMMING COUNTERMEASURES; 0271 = GENERAL JAMMING COUNTERMEASURES; 0272 = GENERAL MAINTENANCE; 0273 = GOVERNMENT, MILITARY; 0274 = GROUND COMBAT, AIR MOBILE (PARTROOPS, TECH.); 0275 = GROUND COMBAT, ANTIAIRCRAFT ARTILLERY (AAA); 0276 = GROUND COMBAT, ARMOR; 0277 = GROUND COMBAT, ARTILLERY-ROCKETS; 0278 = GROUND COMBAT, CAVALRY; 0279 = GROUND COMBAT, CHEMICAL-BIOLOGICAL; 0280 = GROUND COMBAT, COMBINED (MIX EQUIP-INFANTRY); 0281 = GROUND COMBAT, ENGINEERS; 0282 = GROUND COMBAT, GENERAL; 0283 = GROUND COMBAT, INFANTRY; 0284 = GROUND COMBAT, MOTORIZED RIFLE; 0285 = GROUND COMBAT, TANK; 0286 = GROUND SUPPORT; 0287 = HEADQUARTERS, MILITARY DISTRICT; 0288 = HEADQUARTERS/COMMAND AND STAFF; 0289 = HORSE CAVALRY; 0290 = HYDROGRAPHIC OPS; 0291 = HYDROGRAPHIC SPACE OPS; 0292 = INCONCLUSIVE ANALYSIS; 0293 = INFANTRY; 0294 = INFANTRY PRIMARY MISSION; 0295 = INFANTRY, AIRBORNE; 0296 = INFANTRY, ARCTIC; 0297 = INFANTRY, FOOT REGULAR; 0298 = INFANTRY, MECHANIZED; 0299 = INFANTRY, MOUNTAIN; 0300 = INFANTRY, NAVAL; 0301 = INFORMATION WARFARE; 0302 = INTELLIGENCE COLLECTION RESEARCH SHIPS; 0303 = INTELLIGENCE PRIMARY MISSION (MILITARY); 0304 = INTELLIGENCE, AERIAL EXPLOITATION; 0305 = INTELLIGENCE, ALL SOURCE ANALYSIS; 0306 =</p>	

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Proposed JCAPS View of the CADM

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Annex M (Proposed Attribute Specifications)

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
								INTELLIGENCE; COMMUNICATIONS (COMINT) SUPPORT; 0307 = INTELLIGENCE; COUNTERINTELLIGENCE; 0308 = INTELLIGENCE; COVERT; 0309 = INTELLIGENCE; ELECTRONIC ELINT SUPPORT; 0310 = INTELLIGENCE; FOREIGN INSTRUMENTATION SIGNALS (FISINT) SUPPORT; 0311 = INTELLIGENCE; FSU INTEL UNIT (GRU) (FSU); 0312 = INTELLIGENCE; GENERAL; 0313 = INTELLIGENCE; GROUND SURVEILLANCE RADAR; 0314 = INTELLIGENCE; GROUP SURVEILLANCE; 0315 = INTELLIGENCE; HYDRO-Acoustic MONITORING; 0316 = INTELLIGENCE; IMAGERY COLLECTION; 0317 = INTELLIGENCE; PHOTO MAPPING SUPPORT; 0318 = INTELLIGENCE; SIGINT; DIRECTION FINDING; 0319 = INTELLIGENCE; SIGINT; ELECTRONIC WARFARE; 0320 = INTELLIGENCE; SIGINT; INTERCEPT; 0321 = INTELLIGENCE; SIGINT; JAMMING; 0322 = INTELLIGENCE; SIGNAL OPERATIONS (SIGINT); 0323 = INTELLIGENCE; SURVEILLANCE; 0324 = INTELLIGENCE; SURVEILLANCE SENSOR; 0325 = INTELLIGENCE; TACTICAL EXPLOITATION; 0326 = INTELLIGENCE; TECHNICAL; 0327 = INTERNAL SECURITY FORCE; 0328 = INTERNAL SECURITY FORCE; AVIATION; 0329 = INTERNAL SECURITY FORCE; DISMOUNTED GROUND; 0330 = INTERNAL SECURITY FORCE; GROUND; 0331 = INTERNAL SECURITY FORCE; MECHANIZED GROUND; 0332 = INTERNAL SECURITY FORCE; MOTORIZED GROUND; 0333 = INTERNAL SECURITY FORCE; RAILROAD; 0334 = INTERNAL SECURITY FORCE; RIVERINE; 0335 = INTERROGATION/TRANSLATION INTELLIGENCE; 0336 = KGB INTELLIGENCE (USSR ONLY); 0337 = LANDING SUPPORT; 0338 = LAW ENFORCEMENT; AIR SECURITY POLICE (SP); 0339 = LAW ENFORCEMENT; CENTRAL INTELLIGENCE DIVISION; 0340 = LAW ENFORCEMENT; CIVILIAN; 0341 = LAW ENFORCEMENT; GENERAL; 0342 = LAW ENFORCEMENT; MILITARY POLICE (MP) POLICE LAW-ENFORCEMENT; MILITARY; 0343 = LAW ENFORCEMENT; POW GUARDS POLICE POW/PENAL GUARD, MILITARY; 0344 = LAW ENFORCEMENT; SHORE PATROL; 0345 = LAW ENFORCEMENT; TRAFFIC CONTROL; 0346 = LIGHT ARMOR OPERATIONS; 0347 = LIGHT INFANTRY; 0348 = MAINTENANCE; 0349 = MAINTENANCE INSTALLATION; 0350 = MAINTENANCE; ELECTRO-OPTICAL; 0351 = MAINTENANCE; HEAVY; 0352 = MAINTENANCE; MISSILE ORDNANCE; 0353 = MAINTENANCE; ORDNANCE; 0354 = MAINTENANCE; RECOVERY; 0355 = MARITIME AVIATION; 0356 = MEDICAL AIR STATION/TREATMENT FACILITY; 0357 = MEDICAL EVACUATION; 0358 = MEDICAL EVACUATION (AIR); 0359 = MEDICAL HOSPITAL; 0360 = MEDICAL PRIMARY MISSION; 0361 = MEDICAL; DENTAL; 0362 = MEDICAL, PSYCHOLOGICAL; 0363 = MEDICAL; VETERINARY; 0364 = MILITARY POLICE PRIMARY MISSION; 0365 = MINE WARFARE CRAFT; 0366 = MINE WARFARE SHIPS; 0367 = MISCELLANEOUS SUPPORT-AUXILIARIES; 0368 = MISCELLANEOUS SURFACE COMBATANTS; 0369 = MISSILE OPERATIONS (MRBM); 0370 = MISSILE OPERATIONS; ALCM; 0371 = MISSILE; FLEET BALLISTIC (FBM); 0372 = MISSILE; GENERAL; 0373 = MISSILE; GROUND-TO-GROUND OR SURFACE-TO-SURFACE; 0374 = MISSILE; ICBM; 0375 = MISSILE; ICBM; MOBILE; 0376 = MISSILE; IRBM; 0377 = MISSILE; LAUNCH DETECTION; 0378 = MISSILE; MRBM; 0379 = MISSILE; MRBM; MOBILE; 0380 = MISSILE; SURFACE TO AIR	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
								(SAM); 0381 = MISSILES, IRBM, MOBILE; 0382 = MISSILES, STRATEGIC; 0383 = MISSILES, TACTICAL; 0384 = MOBILE LOGISTICS SHIPS; 0385 = NAVAL OPERATIONS MULTI-MISSION; 0386 = NAVAL OPERATIONS PRIMARY MISSION; 0387 = NAVAL TRAFFIC CONTROL; 0388 = NON-COMMUNICATIONS JAMMING COUNTERMEASURES; 0389 = NOT APPLICABLE; 0390 = NOT KNOWN; 0391 = NOT SPECIFIED; 0392 = OBSERVATION, AIR; 0393 = OPERATIONS ANTI-AIR; 0394 = OPERATIONS ANTI-AIRMOOR; 0395 = OPERATIONS ANTISUBMARINE (ASW); 0396 = OPERATIONS ANTISURFACE; 0397 = OPERATIONS ASSAULT CROSSING; 0398 = OPERATIONS BOMBER; 0399 = OPERATIONS, AIR DEFENSE SUPPRESSION; 0400 = OPERATIONS, AIR DUAL ROLE; 0401 = OPERATIONS, AIR MULTI-MISSION; 0402 = OPERATIONS, AIR REFUELING; 0403 = OPERATIONS, AIRBORNE; 0404 = OPERATIONS, AIRBORNE ELECTRONIC WARFARE; 0405 = OPERATIONS, AIRMOBILE; 0406 = OPERATIONS, AMPHIBIOUS; 0407 = OPERATIONS, AMPHIBIOUS (ENGINEERS); 0408 = OPERATIONS, ASSAULT LANDING; 0409 = OPERATIONS, CARRIER; 0410 = OPERATIONS, CIVILIAN; 0411 = OPERATIONS, COASTAL DEFENSE; 0412 = OPERATIONS, COMMANDO; 0413 = OPERATIONS, FIGHTER ESCORT; 0414 = OPERATIONS, FIGHTER-BOMBER; 0415 = OPERATIONS, FIGHTER/INTERCEPTOR; 0416 = OPERATIONS, FIGHTER/INTERCEPTOR (CONTROL); 0417 = OPERATIONS, FLEET LOGISTICS; 0418 = OPERATIONS, GROUND/SURFACE ATTACK; 0419 = OPERATIONS, INFILTRATION/PERSONNEL MOVEMENT; 0420 = OPERATIONS, LONG-RANGE MISSILES; 0421 = OPERATIONS, MINE WARFARE; 0422 = OPERATIONS, MISSILE; GLCM; 0423 = OPERATIONS, MISSILE, ICBM; 0424 = OPERATIONS, MISSILE, ICBM (MOBILE); 0425 = OPERATIONS, MISSILE, IRBM; 0426 = OPERATIONS, MISSILE, IRBM (MOBILE); 0427 = OPERATIONS, MISSILE, MRBM (MOBILE); 0428 = OPERATIONS, MISSILE, SLCM; 0429 = OPERATIONS, MISSILE, SRBM; 0430 = OPERATIONS, MISSILE, SRBM (MOBILE); 0431 = OPERATIONS, MISSILE, TECHNICAL BASE; 0432 = OPERATIONS, NAVAL; 0433 = OPERATIONS, NAVAL MULTI-MISSION; 0434 = OPERATIONS, NAVAL, GENERAL; 0435 = OPERATIONS, PORT; 0436 = OPERATIONS, PSYCHOLOGICAL WARFARE; 0437 = OPERATIONS, RAILROAD; 0438 = OPERATIONS, RIVERINE; 0439 = OPERATIONS, SHORT-RANGE MISSILES; 0440 = OPERATIONS, SUBMARINE; 0441 = OPERATIONS, SUBMARINE, ATTACK; 0442 = OPERATIONS, SUBMARINE, FLEET BALLISTIC MISSILE; 0443 = OPERATIONS, SURFACE SHIP; 0444 = OPERATIONS, TELEMETRY TRACKING; 0445 = ORDNANCE PRIMARY MISSION; 0446 = ORDNANCE, ARSENAL OPERATIONS; 0447 = ORDNANCE, DEPOT MAINTENANCE; 0448 = ORDNANCE, DIRECT SUPPORT AND MAINTENANCE; 0449 = ORDNANCE, DISPOSAL; 0450 = ORDNANCE, GENERAL SUPPORT AND MAINTENANCE; 0451 = ORDNANCE, HEAVY MAINTENANCE; 0452 = ORDNANCE, NUCLEAR WEAPONS HANDLING; 0453 = ORDNANCE, VEHICLE RECOVERY; 0454 = OTHER JAMMING COUNTERMEASURES; 0455 = OTHER, EXPLAIN IN REMARKS; 0456 = OTHER, EXPLAIN IN REMARKS; 0457 = POSTAL SERVICE; 0458 = PRINCIPAL SURFACE COMBATANTS; 0459 = RADAR SUB-CONTROL; 0460 =	

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Annex M (Proposed Attribute Specifications)

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Proposed JCAPS View of the CADM

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
								REAR SERVICES; 0461 = REAR SERVICES PRIMARY MISSION; 0462 = REAR SERVICES, AUXILIARY FORCE; 0463 = RECONNAISSANCE; 0464 = RECONNAISSANCE, AIR; 0465 = RECONNAISSANCE, AIR ASSAULT; 0466 = RECONNAISSANCE, AIR CAVALRY; 0467 = RECONNAISSANCE, ARCTIC; 0468 = RECONNAISSANCE, ARMOR; 0469 = RECONNAISSANCE, ARMORED CAVALRY; 0470 = RECONNAISSANCE, CAVALRY; 0471 = RECONNAISSANCE, GENERAL; 0472 = RECONNAISSANCE, GROUND; 0473 = RECONNAISSANCE, GROUND CAVALRY; 0474 = RECONNAISSANCE, HORSE; 0475 = RECONNAISSANCE, LAND BORDER PATROL; 0476 = RECONNAISSANCE, LIGHT; 0477 = RECONNAISSANCE, LONG RANGE SURVEILLANCE; 0478 = RECONNAISSANCE, MARITIME; 0479 = RECONNAISSANCE, MOTORIZED CAVALRY; 0480 = RECONNAISSANCE, MOUNTAIN; 0481 = RECONNAISSANCE, SPACE; 0482 = RECONNAISSANCE, STRATEGIC; 0483 = RECONNAISSANCE, TACTICAL; 0484 = RESEARCH AND DEVELOPMENT; 0485 = RESEARCH AND DEVELOPMENT, AIR; 0486 = RESEARCH AND DEVELOPMENT, GENERAL; 0487 = RESEARCH AND DEVELOPMENT, GROUND; 0488 = RESEARCH AND DEVELOPMENT, MARITIME; 0489 = RESEARCH AND DEVELOPMENT, MISSILE; 0490 = RESEARCH AND DEVELOPMENT, SPACE; 0491 = SAM; 0492 = SAM, TACTICAL; 0493 = SATELLITE CONTROL; 0494 = SEABORNE COMBAT, GENERAL; 0495 = SEABORNE COMBAT, WATER BORDER PATROL; 0496 = SEARCH AND RESCUE; 0497 = SECTOR FILTER CENTER; 0498 = SECURITY, REAR AREA; 0499 = SIGNAL/ELECTRONIC PRIMARY MISSION; 0500 = SIGNALS ELECTRONICS COMINT; 0501 = SIGNALS ELECTRONICS COMMUNICATION JAMMING; 0502 = SIGNALS ELECTRONICS, DIRECTION FINDING; 0503 = SIGNALS ELECTRONICS, AIR DEFENSE JAMMING; 0504 = SIGNALS ELECTRONICS, AIR TRAFFIC CONTROL; 0505 = SIGNALS ELECTRONICS, COMBINED SIGINT AND JAMMING; 0506 = SIGNALS ELECTRONICS, COMMUNICATION CENTER; 0507 = SIGNALS ELECTRONICS, ELINT; 0508 = SIGNALS ELECTRONICS, FORWARD AREA SUPPORT; 0509 = SIGNALS ELECTRONICS, GENERAL; 0510 = SIGNALS ELECTRONICS, GROUND RADAR JAMMING; 0511 = SIGNALS ELECTRONICS, IMINT; 0512 = SIGNALS ELECTRONICS, PASSIVE DETECTION; 0513 = SIGNALS ELECTRONICS, RADIO, 0514 = SIGNALS ELECTRONICS, RADIO RELAY; 0515 = SIGNALS ELECTRONICS, SATELLITE GROUND STATION; 0516 = SIGNALS ELECTRONICS, SIGINT; 0517 = SIGNALS ELECTRONICS, SWITCHING CENTER; 0518 = SIGNALS ELECTRONICS, WIRING; 0519 = SIGNALS, (MSE) MULTIPLE SUBSCRIBER ELEMENT; 0520 = SIGNALS, AREA; 0521 = SIGNALS, COMMAND OPERATIONS; 0522 = SIGNALS, COMMUNICATION CONFIGURED PACKAGE; 0523 = SIGNALS, ELECTRONIC RANGING; 0524 = SIGNALS, LARGE COMMUNICATION CONFIGURED PACKAGE; 0525 = SIGNALS, MSE LARGE EXTENSION NODE; 0526 = SIGNALS, MSE NODE CENTER; 0527 = SIGNALS, MSE SMALL EXTENSION NODE; 0528 = SIGNALS, SIGNAL SUPPORT; 0529 = SIGNALS, TACTICAL SATELLITE; 0530 = SIGNALS, TELEPHONE SWITCH; 0531 = SIGNALS, TELETYPE CENTER; 0532 = SPACE COMBAT; 0533 = SPACE PRIMARY MISSION; 0534 = SPACE SUPPORT SHIPS; 0535	

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Annex M (Proposed Attribute Specifications)

UNCLASSIFIED

Proposed JCAPS View of the CADM

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
								= SPACE, GENERAL; 0536 = SPECIAL C2 HEADQUARTERS; 0537 = SPECIAL OPERATIONS FORCES, AVIATION; 0538 = SPECIAL OPERATIONS FORCES, AVIATION (FIXED-WING) ATTACK; 0539 = SPECIAL OPERATIONS FORCES, AVIATION (FIXED-WING), UTILITY; 0540 = SPECIAL OPERATIONS FORCES, AVIATION (FIXED-WING), UTILITY MEDIUM; 0541 = SPECIAL OPERATIONS FORCES, AVIATION (FIXED-WING), UTILITY, HEAVY; 0542 = SPECIAL OPERATIONS FORCES, AVIATION (FIXED-WING), UTILITY, LIGHT; 0543 = SPECIAL OPERATIONS FORCES, AVIATION (HELO) ATTACK; 0544 = SPECIAL OPERATIONS FORCES, AVIATION (HELO) COMBAT SEARCH & RESCUE; 0545 = SPECIAL OPERATIONS FORCES, AVIATION (HELO), UTILITY; 0546 = SPECIAL OPERATIONS FORCES, AVIATION (HELO), UTILITY, HEAVY; 0547 = SPECIAL OPERATIONS FORCES, AVIATION (HELO), UTILITY, LIGHT; 0548 = SPECIAL OPERATIONS FORCES, AVIATION (HELO), UTILITY, MEDIUM; 0549 = SPECIAL OPERATIONS FORCES, AVIATION VSTOL; 0550 = SPECIAL OPERATIONS FORCES, AVIATION, HELICOPTER (HELO); 0551 = SPECIAL OPERATIONS FORCES, AVIATION, REFUEL; 0552 = SPECIAL OPERATIONS FORCES, CIVIL AFFAIRS; 0553 = SPECIAL OPERATIONS FORCES, FIXED- WING, AVIATION; 0554 = SPECIAL OPERATIONS FORCES, GROUND; 0555 = SPECIAL OPERATIONS FORCES, NAVAL; 0556 = SPECIAL OPERATIONS FORCES, NAVAL, PSYCHOLOGICAL OPERATIONS; 0557 = SPECIAL OPERATIONS FORCES, NAVAL, SEAL; 0558 = SPECIAL OPERATIONS FORCES, NAVAL, SPECIAL BOAT; 0559 = SPECIAL OPERATIONS FORCES, NAVAL, SPECIAL SSNR; 0560 = SPECIAL OPERATIONS FORCES, NAVAL, UNDERWATER DEMOLITION; 0561 = SPECIAL OPERATIONS FORCES, RANGER; 0562 = SPECIAL OPERATIONS FORCES, SPECIAL FORCES; 0563 = SPECIAL OPERATIONS FORCES, SUPPORT; 0564 = SPECIAL PURPOSE, AIR; 0565 = SPECIAL PURPOSE, GENERAL; 0566 = SPECIAL PURPOSE, GROUND; 0567 = SPECIAL PURPOSE, GUARD; 0568 = SPECIAL PURPOSE, MARITIME; 0569 = SPECIAL PURPOSE, SPACE; 0570 = SPECIAL-UNCONVENTIONAL OPERATIONS FORCES; 0571 = SPECIAL/UNCONVENTIONAL FORCES PRIMARY MISSION; 0572 = STRATEGIC MISSILES PRIMARY MISSION; 0573 = SUBMARINES; 0574 = SUPPLY; 0575 = SUPPLY AND REPAIR; 0576 = SUPPLY PRIMARY MISSION; 0577 = SUPPLY, AMMUNITION; 0578 = SUPPLY, CLOTHING/INDIVIDUAL EQUIPMENT; 0579 = SUPPLY, CONSTRUCTION MATERIALS; 0580 = SUPPLY, DEPOT; 0581 = SUPPLY, LOGISTICS; 0582 = SUPPLY, MAJOR END ITEMS READY FOR USE; 0583 = SUPPLY, MATERIAL FOR NON-MILITARY PROGRAMS; 0584 = SUPPLY, MEDICAL MATERIAL; 0585 = SUPPLY, MIXED; 0586 = SUPPLY, PERSONNEL DEMAN ITEMS; 0587 = SUPPLY, PETROLEUM, OIL, LUBRICANTS; 0588 = SUPPLY, QUARTERMASTER; 0589 = SUPPLY, SUBSISTENCE; 0590 = SUPPORT ELECTRONICS, RADIO RELAY; 0591 = SUPPORT, AIRBASE; 0592 = SUPPORT, COMMUNICATIONS; 0593 = SUPPORT, GENERAL; 0594 = SUPPORT, LIAISON; 0595 = SUPPORT, MAINTENANCE; 0596 = SUPPORT, MEDICAL; 0597 = SUPPORT, METEOROLOGICAL; 0598 = SUPPORT, MISSILE SUPPORT FACILITY; 0599 = SUPPORT, POL; 0600 = TACTICAL MISSILES PRIMARY MISSION; 0601 =	

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Entity Name	Attribute Name	Col. Name	Do- main	Data- type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
								TANK; 0602 = TANK - MECHANIZED MIXED; 0603 = TANK RECOVERY; 0604 = TANK, AMPHIBIOUS; 0605 = TELEMETRY, TACKLING AND COMMAND; 0606 = TRAFFIC CONTROL; 0607 = TRAINING; 0608 = TRAINING ACADEMY; 0609 = TRAINING BRANCH; 0610 = TRAINING PRIMARY MISSION; 0611 = TRAINING, AIR; 0612 = TRAINING, BASIC; 0613 = TRAINING, CONVERSION; 0614 = TRAINING, GENERAL; 0615 = TRAINING, GROUND; 0616 = TRAINING, HEADQUARTERS; 0617 = TRAINING, MARITIME; 0618 = TRAINING, MISSILE; 0619 = TRAINING, OPERATIONAL; 0620 = TRAINING, PRE-MILITARY; 0621 = TRAINING, SPACE; 0622 = TRAINING, SPECIAL; 0623 = TRANSPORT AIRLIFT; 0624 = TRANSPORT, AIRBORNE CIVIL; 0625 = TRANSPORT, AIRBORNE MILITARY; 0626 = TRANSPORT, AIRLIFT, CIVILIAN; 0627 = TRANSPORT, ANTI-SUBMARINE (ASW); 0628 = TRANSPORT, ARMORED CARGO CARRIER; 0629 = TRANSPORT, ARMORED PERSONNEL CARRIER; 0630 = TRANSPORT, GENERAL; 0631 = TRANSPORT, GROUND (ROAD); 0632 = TRANSPORT, MARITIME; 0633 = TRANSPORT, MISSILE MOTOR; 0634 = TRANSPORT, MOTORIZED; 0635 = TRANSPORT, POL MOTOR; 0636 = TRANSPORT, RAILBORNE; 0637 = TRANSPORT, RIVERINE; 0638 = TRANSPORT, SPACE; 0639 = TRANSPORT, TANKER; 0640 = TRANSPORTATION PRIMARY MISSION; 0641 = TROOPS, BORDER (SECURITY); 0642 = TROOPS, CONVOY (FSU ONLY); 0643 = TROOPS, FORTIFIED AREA UNIT; 0644 = TROOPS, GARRISON; 0645 = TROOPS, GENERAL; 0646 = TROOPS, INTERNAL SECURITY; 0647 = TROOPS, SPECIAL GUARDS; 0648 = UNDETERMINED C2 MISSION; 0649 = UNRESTRICTED; 0650 = UNSPECIFIED PRIMARY MISSION; 0651 = WARNING, AIR DEFENSE ASSOCIATED WC; 0652 = YARD AND SERVICE CRAFT; 0653 = YARD CRAFT; 9998 = NOT SPECIFIED; 9999 = NOT KNOWN. (DDDS, 10 August 2000)	
MISSION	MISSION Composition Type Code	MSN_cm psin_ty_cd	Code_ smallint	smallint	NULL	No	No	The code that represents a class of MISSION according to the expected participants (e.g., joint, coalition).	1--Joint; 2--Coalition; 3--Combined; 4--Service-specific. Source: C4ISR Architecture Data Model, Version 2.0 (Section A.2.1.3). Added for ASA Data Model: 8--Not Specified; 9--Not known.
MISSION	MISSION Description Text	MSN_desc_tx	String	varchar(150)	NULL	No	No	The text that briefly summarizes a specific MISSION.	
MISSION	MISSION EFFECTIVE CALENDAR DATE-TIME	MSN_EFFECT_CALENDAR_TTM	Datetime	datetime	NULL	No	No	(50830/1) (A) THE CALENDAR DATE-TIME FOR WHICH A MISSION IS TO TAKE EFFECT.	
MISSION	MISSION IDENTIFIER	MSN_ID	Id(int)	int	NOT NULL	Yes	No	(42143/1) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC MISSION.	
MISSION	MISSION Mode Code	MSN_mode_cd	Code_ smallint	smallint	NULL	No	No	The code that designates the level of warfare for a specific MISSION. [Architecture Framework Panel, "Attributes for Architecture Products," June 1997]	1--Peace; 2--Crisis; 3--War; 4--Operations other than war [Architecture Framework Panel, "Attributes for Architecture Products," June 1997]. Added for ASA Data Model: 8--Not Specified; 9--Not known.
MISSION	MISSION TYPE CODE	MSN_TY_CD	String	char(1)	NULL	No	No	(48507/1) (A) THE CODE THAT DENOTES A KIND OF MISSION.	E = EXERCISE; P = PEACETIME; W = WARTIME. (DDDS, 10 August 2000)

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
MISSION	OPERATIONAL-SCENARIO Identifier	OP_SCE_N_id	Id(int)	int	NULL	No	Yes	The identifier of a specific OPERATIONAL-SCENARIO.	
MISSION-AREA	MISSION-AREA DESCRIPTION TEXT	MA_desc_r_tx	String	varchar(8000)	NULL	No	No	(16076) (A) THE TEXT THAT DESCRIBES A MISSION-AREA.	
MISSION-AREA	MISSION-AREA NAME	MA_nm	String	varchar(30)	NULL	No	No	(16077) (A) THE NAME OF A MISSION-AREA.	
MISSION-AREA	MISSION-AREA TYPE CODE	MA_ty_cd	Code_smallint	smallint	NOT NULL	Yes	No	(16078) (A) THE CODE THAT DENOTES A CLASS OF MISSION-AREA. 01--MOBILIZATION; 02--INTELLIGENCE; 03--EMPLOYMENT; 04--SEARCH AND RESCUE; 05--CONSTRUCTION; 06--AMPHIBIOUS WARFARE; 07--ANTI-AIR WARFARE; 08--SPECIAL OPERATIONS; 09--PSYCHOLOGICAL OPERATIONS; 10--CIVIL AFFAIRS. Additions from Naval Architecture Database: 11--AMPH--Amphibious Warfare; 12--STRK--Strike Warfare; 13--UNSW--Undersea Warfare; 14--MINE--Mining Warfare; 15--TAD--Theater Air Defense; 16--ISR--Intelligence Surveillance & Reconnaissance; 17--AIR--Air Warfare; 18--SURF--Surface Warfare. - Other additions: 19--C2--Command and Control; 20--FS--Fire Support; 21--IW--Information Warfare; 22--LOG--Logistics; 23--MAR--Maritime (General); 24--MVR--Maneuver and Land Warfare; 25--C2W--Command and Control Warfare; 26--OCA--Offensive Counter Air; 27--DCA--Defense Counter Air; 28--AIRC--Airspace Control; 29--INT--Interdiction; 30--EW--Electronic Warfare.	
MISSION-AREA-FUNCTIONAL-AREA	FUNCTIONAL-AREA IDENTIFIER	FUNCAR_id	Id(int)	int	NOT NULL	Yes	Yes	(20492) (A) THE IDENTIFIER THAT REPRESENTS A FUNCTIONAL-AREA.	
MISSION-AREA-FUNCTIONAL-AREA	MISSION-AREA TYPE CODE	MA_ty_cd	Code_smallint	smallint	NOT NULL	Yes	Yes	(16078) (A) THE CODE THAT DENOTES A CLASS OF MISSION-AREA. 01--MOBILIZATION; 02--INTELLIGENCE; 03--EMPLOYMENT; 04--SEARCH AND RESCUE; 05--CONSTRUCTION; 06--AMPHIBIOUS WARFARE; 07--ANTI-AIR WARFARE; 08--SPECIAL OPERATIONS; 09--PSYCHOLOGICAL OPERATIONS; 10--CIVIL AFFAIRS. Additions from Naval Architecture Database: 11--AMPH--Amphibious Warfare; 12--STRK--Strike Warfare; 13--UNSW--Undersea Warfare; 14--MINE--Mining Warfare; 15--TAD--Theater Air Defense; 16--ISR--Intelligence Surveillance & Reconnaissance; 17--AIR--Air Warfare; 18--SURF--Surface Warfare. - Other additions: 19--C2--Command and Control; 20--FS--Fire Support; 21--IW--Information Warfare; 22--LOG--Logistics; 23--MAR--Maritime (General); 24--MVR--Maneuver and Land Warfare; 25--C2W--Command and Control Warfare; 26--OCA--Offensive Counter Air; 27--DCA--Defense Counter Air; 28--AIRC--Airspace Control; 29--INT--Interdiction; 30--EW--Electronic Warfare.	
MISSION-AREA-FUNCTIONAL-AREA	MISSION-AREA-FUNCTIONAL-AREA Description Text {JCAPS}	MAFA_desc_tx	String	varchar(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A MISSION-AREA-FUNCTIONAL-AREA.	Source: JCAPS 2.1 (MS_AR_F_AR_DTX).
MISSION-AREA-FUNCTIONAL-AREA	MISSION-AREA-FUNCTIONAL-AREA Role Code	MAFA_role_cd	Code_smallint	smallint	NULL	No	No	The code that designates the specific way in which a FUNCTIONAL-AREA is cited for an instance of MISSION-AREA.	1 = Is supported by; 2 = References; 8 = Not specified; 9 = Not known.

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
MISSION-AREA-PROCESS-ACTIVITY {JCAPS}	MISSION-AREA-TYPE CODE	MA_ty_cd	Code_smallint	smallint	NOT NULL	Yes	Yes	(16078) (A) THE CODE THAT DENOTES A CLASS OF MISSION-AREA.	01--MOBILIZATION; 02--INTELLIGENCE; 03--EMPLOYMENT; 04--SEARCH AND RESCUE; 05--CONSTRUCTION; 06--AMPHIBIOUS WARFARE; 07--ANTI-AIR WARFARE; 08--SPECIAL OPERATIONS; 09--PSYCHOLOGICAL OPERATIONS; 10--CIVIL AFFAIRS. Additions from Naval Architecture Database: 11--AMPH--Amphibious Warfare; 12--STRK--Strike Warfare; 13--UNSW--Undersea Warfare; 14--MINE--Mining Warfare; 15--TAD--Theater Air Defense; 16--ISR--Intelligence Surveillance & Reconnaissance; 17--AIR--Air Warfare; 18--SURF--Surface Warfare. - Other additions: 19--C2--Command and Control; 20--FS--Fire Support; 21--IW--Information Warfare; 22--LOG--Logistics; 23--MAR--Maritime (General); 24--MVR--Maneuver and Land Warfare; 25--C2W--Command and Control Warfare; 26--OCA--Offensive Counter Air; 27--DCA--Defense Counter Air; 28--AIRC--Airspace Control; 29--INT--Interdiction; 30--EW--Electronic Warfare.
MISSION-AREA-PROCESS-ACTIVITY {JCAPS}	PROCESS-ACTIVITY IDENTIFIER	PA_id	Id(int)	int	NOT NULL	Yes	Yes	(29165/2) (A) THE IDENTIFIER THAT REPRESENTS A PROCESS-ACTIVITY.	
MISSION-ESSENTIAL-TASK	TASK IDENTIFIER	TSK_id	Id(int)	int	NOT NULL	Yes	Yes	(9282) (A) THE IDENTIFIER THAT REPRESENTS A TASK.	
MISSION-ESSENTIAL-TASK-LIST	DOCUMENT IDENTIFIER	DOC_ID	Id(int)	int	NOT NULL	Yes	Yes	(9643/2) (A) THE IDENTIFIER THAT REPRESENTS A DOCUMENT.	
MISSION-ESSENTIAL-TASK-LIST-ELEMENT	CONDITION Identifier	COND_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific CONDITION.	
MISSION-ESSENTIAL-TASK-LIST-ELEMENT	Mission Essential Task List Document Identifier	DOC_ID	Id(int)	int	NOT NULL	Yes	Yes	(9643/2) (A) THE IDENTIFIER THAT REPRESENTS A DOCUMENT.	
MISSION-ESSENTIAL-TASK-LIST-ELEMENT	MISSION IDENTIFIER	MSN_ID	Id(int)	int	NULL	No	Yes	(42143/1) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC MISSION.	
MISSION-ESSENTIAL-TASK-LIST-ELEMENT	MISSION-ESSENTIAL-TASK-LIST-ELEMENT Identifier	METLE_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a MISSION-ESSENTIAL-TASK-LIST-ELEMENT for a specific MISSION-ESSENTIAL-TASK-LIST.	
MISSION-ESSENTIAL-TASK-LIST-ELEMENT	MISSION-ESSENTIAL-TASK-STANDARD Identifier	METSTD_id	Id(int)	int	NULL	No	Yes	The identifier of a MISSION-ESSENTIAL-TASK-STANDARD for a specific TASK and a specific TASK-MEASURE.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
MISSION-ESSENTIAL-TASK-LIST-ELEMENT	TASK IDENTIFIER	TSK_id	Id(int)	int	NOT NULL	No	Yes	(9282) (A) THE IDENTIFIER THAT REPRESENTS A TASK.	
MISSION-ESSENTIAL-TASK-LIST-ELEMENT	TASK-MEASURE Identifier	TSKMEA S_id	Id(int)	int	NULL	No	Yes	The identifier of a TASK-MEASURE for a specific TASK.	
NETWORK	CAVEATED-SECURITY-CLASSIFICATION IDENTIFIER	CSC_ID	Id(int)	int	NULL	No	Yes	(18225/1) (A) THE IDENTIFIER OF A CAVEATED-SECURITY-CLASSIFICATION. NOTE: BLOCKS OF IDENTIFIERS WILL BE ALLOCATED TO DEFENSE ORGANIZATIONS. IT WILL BE UP TO EACH DEFENSE ORGANIZATION TO ALLOCATE AND CONFIGURATION MANAGE ITS OWN IDENTIFIERS.	
NETWORK	ICON-CATALOG Identifier	ICONCA T_id	Id(int)	int	NULL	No	Yes	The identifier of a specific instance of ICON-CATALOG.	
NETWORK	Managing ARCHITECTURE-ORGANIZATION Identifier	Mng_AR CH_ORG_id	Id(int)	int	NULL	No	Yes	The unique identifier of an ARCHITECTURE-ORGANIZATION as implemented by the Army Systems Architecture Data Model. ASA owner: PEO-C3S.	
NETWORK	NETWORK Acronym Name	NTWK_a cron_nm	String	varchar(50)	NULL	No	No	The abbreviation for a specific NETWORK.	
NETWORK	NETWORK DESCRIPTION TEXT	NTWK_d escr_tx	Text(8000)	varchar(8000)	NULL	No	No	THE TEXT THAT DESCRIBES A NETWORK. Source: JCAPS.	
NETWORK	NETWORK ESTIMATED USER QUANTITY	NTWK_e st_user_qy	Numb er	int	NULL	No	No	THE ESTIMATED NUMBER OF USERS OF A NETWORK. Source: JCAPS.	UNIT: Each (number of users).
NETWORK	NETWORK Identifier	NTWK_id	Id(int)	int	NOT NULL	Yes	No	The unique identifier of a specific NETWORK.	
NETWORK	NETWORK Implementation Type Code	NTWK_i mplem_ty_cd	String	varchar(3)	NULL	No	No	The code that denotes a design class of NETWORK. LAN--Local area network; MAN--Metropolitan area network; WAN--Wide area network; TEL--Telephone network; TGH--Telegraph network; BDX--Broadcast network; PKT--Packet Switching Network; CIR--Circuit Switching Network; MSG--Message Switching Network; RFN--Radio Frequency Network. Added for ASA: N--Not specified; X--Not known.	
NETWORK	NETWORK LOGICAL TOPOLOGY NAME	NTWK_l ogc_topo_l_nm	Name	varchar(50)	NULL	No	No	THE LOGICAL CONFIGURATION OF THE CONNECTIVITY OF A NETWORK. Source: JCAPS.	
NETWORK	NETWORK MAXIMUM SIMULTANEOUS USER QUANTITY	NTWK_maxsim_usr_qy	Numb er	int	NULL	No	No	THE MAXIMUM NUMBER OF SIMULTANEOUS USERS THAT A NETWORK CAN SUPPORT. Source: JCAPS.	UNIT: Each (number of users).
NETWORK	NETWORK MAXIMUM THROUGHPUT RATE	NTWK_max_thru_rt	Numb er	float	NULL	No	No	THE MAXIMUM NUMBER OF BITS PER SECOND THAT A NETWORK CAN SUPPORT. Source: JCAPS.	Rate is BITS/SECOND.

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
NETWORK	NETWORK NAME	NTWK_nm	Name	varchar(50)	NULL	No	No	THE NAME OF A NETWORK. Source: JCAPS.	
NETWORK	NETWORK Record Security Classification Code	NTWK_sec_cd	Security Classification	char(1)	NULL	No	No	The code that denotes the security classification of the metadata describing the Communication-Electronic-Network.	U = Unclassified, C = Confidential; S = Secret. Source: C4RDP, Communication-Electronic-Network Security-Classification Code--The code that denotes the security classification of the metadata describing the Communication-Electronic-Network.
NETWORK	NETWORK-CONTROL-ORGANIZATION-TYPE Identifier	NTWK_COT_id	Id(int)	int	NULL	No	Yes	The unique identifier for a specific NETWORK-CONTROL-ORGANIZATION-TYPE.	Communication-Electronic-Network-Responsibility Quantity (The quantity that represents the Communication Electronic Network Responsibility.)
NETWORK	NETWORK-TYPE Identifier	NTWKT_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NETWORK-TYPE.	Communication-Electronic-Network-Type Quantity (The quantity that represents the Communication Electronic Network Type.)
NETWORK	OPERATIONAL-FACILITY-ECHELON Code	OF_ECH_cd	String	char(1)	NULL	No	Yes	The code that represents a specific OPERATIONAL-FACILITY-ECHELON.	0 = MULT--MULTIPLE ECHELONS OF TOES; 1 = CONUS; 2 = THEATER/ARMY/EAC--THEATER/ARMY/ECHOLON ABOVE CORPS; 3 = CORPS; 4 = DIV--DIVISION; 5 = BDE/RGT--BRIGADE/REGIMENT; 6 = GP/RGT--GROUP/REGIMENT; 7 = TO BE DETERMINED (TBD); 8 = BN/SQDN--BATTALION/SQUADRON; 9 = HOSPITAL; A = HHB/HHC/HHD--HQ & HQ UNITS (for Btry, Co, & Det); B = CO/BTRY/TRP--COMPANY/BATTERY/TROOP (not a Hq & Hq); E = DET--DETACHMENT (not a Hq & Hq); F = PLT--PLATOON; G = SQD--SQUAD; H = SEC/PARTY/BR--SECTION/PARTY/BANCH; I = TWELEM/CREW/CELL--TEAM/ELEMENT/CREW/CELL; J = NODE; L = CEN--CENTER; M = CMD--COMMAND; N = DIVARTY--DIVISION ARTILLERY; P = CORPS ARTY--CORPS ARTILLERY; Q = DISCOM--DIVISION SUPPORT COMMAND; R = COSCOM--CORPS SUPPORT COMMAND; S = TAACOM/TSC--THEATER AR AREA CMD/THEATER SPT CMD; Y = EAC (NON ARMY); Z = SUPPORTED UNIT (SPTD UNIT). Source: C4RDP Database--C4RDP, Echelon Code--The code that represents the hierarchical ties to a unit in relation to subordinate/superior units.
NETWORK	Owning ARCHITECTURE-ORGANIZATION Identifier	Own_AR_CH_ORG_id	Id(int)	int	NULL	No	Yes	The unique identifier of an ARCHITECTURE-ORGANIZATION as implemented by the Army Systems Architecture Data Model. ASA owner: PEO-C3S.	
NETWORK	Predominant Communication System SYSTEM Identifier	SYS_id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
NETWORK	Representative NODE Identifier	NODE_ID	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NODE.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
NETWORK	SECURITY-CLASSIFICATION CODE	SC_cd	Code_smallint	smallint	NULL	No	Yes	(26900/3) (A) THE CODE THAT REPRESENTS A SECURITY-CLASSIFICATION. (DDDS, 10 August 2000)	01 = CONFIDENTIAL; 02 = CONFIDENTIAL RESTRICTED; 03 = FOR OFFICIAL USE ONLY; 04 = NATO CONFIDENTIAL; 05 = NATO CONFIDENTIAL ATOMAL; 06 = NATO RESTRICTED; 07 = NATO SECRET; 08 = NATO SECRET ATOMAL; 09 = NATO TOP SECRET; 10 = NATO TOP SECRET ATOMAL; 11 = SECRET; 12 = SECRET RESTRICTED; 13 = TOP SECRET; 14 = UNCLASSIFIED; 15 = UNCLASSIFIED SENSITIVE; 98 = NOT SPECIFIED; 99 = NOT KNOWN (DDDS, 10 August 2000)
NETWORK-ASSOCIATION	NETWORK-ASSOCIATION Description Text	NTWKA_desc_tx	String	varchar(150)	NULL	No	No	The text that summarizes a NETWORK-ASSOCIATION.	
NETWORK-ASSOCIATION	NETWORK-ASSOCIATION IDENTIFIER	NTWKA_id	Id(int)	int	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A NETWORK-ASSOCIATION.	
NETWORK-ASSOCIATION	NETWORK-ASSOCIATION Type Code	NTWKA_ty_cd	Code_smallint	smallint	NULL	No	No	The code that designates a specific class of NETWORK-ASSOCIATION.	1 = Is part (a subnetwork) of; 2 = Replaces; 3 = Is equivalent to; 4 = Supports; 8 = Not specified; 9 = Not known.
NETWORK-ASSOCIATION	Ordinate NETWORK Identifier	Ord_NTWK_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NETWORK.	
NETWORK-ASSOCIATION	Subordinate NETWORK Identifier	Sub_NTWK_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NETWORK.	
NETWORK-NODE	NETWORK Identifier	NTWK_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NETWORK.	
NETWORK-NODE	NETWORK-NODE Identifier	NTWK_ID_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a NETWORK-NODE for a specific NETWORK and a specific NODE.	
NETWORK-NODE	NETWORK-NODE Role Code	NTWK_ID_role_cd	Code_smallint	smallint	NULL	No	No	The code that designates the specific way in which a NODE is cited for a NETWORK.	1--Has a gateway represented by; 2--Has as a subscriber; 3--Has as a controlling node; 4--Has as a security monitoring node; 5--Is contained in; 6--Is a network entirely represented by; 8--Not specified; 9--Not known.
NETWORK-NODE	NETWORK Identifier	NODE_ID	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
NETWORK-ORGANIZATION	NETWORK Identifier	NTWK_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NETWORK.	
NETWORK-ORGANIZATION	NETWORK-ORGANIZATION Identifier	NTWK_ORG_id	Id(int)	int	NOT NULL	Yes	No	The unique identifier of a specific NETWORK-ORGANIZATION for a specific NETWORK and a specific ORGANIZATION.	
NETWORK-ORGANIZATION	NETWORK-ORGANIZATION Role Code	NTWK_ORG_role_cd	Code_smallint	smallint	NULL	No	No	The code that designates the specific way in which a NETWORK cites an ORGANIZATION.	1 = Is operated by; 2 = Is maintained by; 3 = Is installed by; 4 = Supports operation of; 5 = Is used to address; 6 = Is administered by; 8 = Not specified; 9 = Not known.
NETWORK-ORGANIZATION	ORGANIZATION IDENTIFIER	ORG_id	Id(int)	int	NOT NULL	Yes	Yes	(7875/1) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	
NETWORK-ORGANIZATION	ARCHITECTURE-ORGANIZATION Identifier	AARCH_ORG_id	Id(int)	int	NULL	No	Yes	The unique identifier of an ARCHITECTURE-ORGANIZATION as implemented by the Army Systems Architecture Data Model. ASA owner: PEO-C3S.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
NODE	ICON-CATALOG Identifier	ICONCAT_id	Id(int)	int	NULL	No	Yes	The identifier of a specific instance of ICON-CATALOG.	
NODE	NODE Category Code	NODE_cat_cd	String	varchar(2)	NULL	No	No	The class of a specific NODE.	AS--Assessment Node; C2 (BM)--Battle Management Node; CL--Collection Node; CD--Combat Direction Node; CM--Communications Node; EX (Weapon)--Execution Node; PR--Processing Node; PL--Platform; PA--Process Activity; SY--System; SE--System Element; O--Organization; P--Person; N--Not applicable; X--Not known. Added for JCAPS: SI--System Instance(s).
NODE	NODE Description Text	NODE_desc_tx	Text(255)	varchar(255)	NULL	No	No	The text that summarizes a specific NODE.	
NODE	NODE Identifier	NODE_id	Id(int)	int	NOT NULL	Yes	No	The unique identifier of a specific NODE.	
NODE	NODE Limitations Description Text	NODE_lim_desc_tx	Text(255)	varchar(255)	NULL	No	No	The text that amplifies the restrictions of a specific NODE.	
NODE	NODE Location Text {JCAPS}	ND_SYS_loc_tx	String	varchar(250)	NULL	No	No	THE LOCATION OF A COMMAND AND CONTROL ELEMENT	Source: JCAPS 2.1 (C2E_LOC).
NODE	NODE Name	NODE_nm	Name	varchar(50)	NULL	No	No	The name of a specific NODE.	
NODE	NODE Physical Indicator Code	NODE_phy_ind_cd	String	char(1)	NULL	No	No	The code that denotes whether the NODE is notional or represents a real instance.	L--Logical; P--Physical; N--Not specified; X--Not known.
NODE	NODE User Code {JCAPS}	NODE_usr_ser_cd	String	char(1)	NULL	No	No	The code that represents a specific user for a specific NODE.	Domain is TBD from JCAPS. Examples: A - JTF, B - NAVFOR, J - AFFOR (from JCAPS IDD). Source: JCAPS 2.1 (USER_CODE).
NODE-ASSOCIATION	DOCUMENT IDENTIFIER	DOC_ID	Id(int)	int	NULL	No	Yes	(9643/2) (A) THE IDENTIFIER THAT REPRESENTS A DOCUMENT.	
NODE-ASSOCIATION	Node 1 NODE Identifier	Node_1_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
NODE-ASSOCIATION	Node 2 NODE Identifier	Node_2_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
NODE-ASSOCIATION	NODE-ASSOCIATION Category Code	NA_cat_cd	Code_smallint	smallint	NULL	No	No	The code that specifies a class of NODE-ASSOCIATION according to its function in information exchange.	1--Node Hierarchy, 2--Node Link, 8--Not applicable, 9--Not known.
NODE-ASSOCIATION	NODE-ASSOCIATION Collocation Indicator Code	NA_colloc_ind_cd	Code_smallint	smallint	NULL	No	No	The code that indicates whether Node 2 is collocated with Node 1.	1--Collocated, 2--Not collocated, 3--Portions collocated and other portions not collocated, 8--Not applicable, 9--Not known.
NODE-ASSOCIATION	NODE-ASSOCIATION Description Text	NA_desc_tx	Text(255)	varchar(255)	NULL	No	No	The text that summarizes a specific NODE-ASSOCIATION.	
NODE-ASSOCIATION	NODE-ASSOCIATION Identifier	NA_ID	Id(int)	int	NOT NULL	Yes	No	The identifier of a NODE-ASSOCIATION for a specific Node 1 NODE and a specific Node 2 NODE.	
NODE-ASSOCIATION	NODE-ASSOCIATION Name	NA_nm	Name	varchar(50)	NULL	No	No	The name assigned to a NODE-ASSOCIATION.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition		Attribute Domain Note
								The code that specifies the way in which Node 2 is related to Node 1.	1--Is a primary supporting node for; 2--Is a secondary supporting node for; 3--Is a non-essential supporting node for; 8--Not applicable; 9--Not known.	
NODE-ASSOCIATION	NODE-ASSOCIATION Type Code	NA_ty_cd	Code, smallint	smallint	NULL	No	No			
NODE-ASSOCIATION-INTEROPERABILITY-REQUIREMENT	Interop Req GUIDANCE Identifier	Req_GUID_id	Id(int)	int	NOT NULL	Yes	Yes		(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
NODE-ASSOCIATION-INTEROPERABILITY-REQUIREMENT	Node 1 NODE Identifier	Node_1_NODE_id	Id(int)	int	NOT NULL	Yes	Yes		The unique identifier of a specific NODE.	
NODE-ASSOCIATION-INTEROPERABILITY-REQUIREMENT	Node 2 NODE Identifier	Node_2_NODE_id	Id(int)	int	NOT NULL	Yes	Yes		The unique identifier of a specific NODE.	
NODE-ASSOCIATION-INTEROPERABILITY-REQUIREMENT	NODE-ASSOCIATION Identifier	NA_ID	Id(int)	int	NOT NULL	Yes	Yes		The identifier of a NODE-ASSOCIATION for a specific Node 1 NODE and a specific Node 2 NODE.	
NODE-ASSOCIATION-INTEROPERABILITY-REQUIREMENT	NODE-ASSOCIATION-INTEROPERABILITY-REQUIREMENT Identifier	NAREQ_id	Id(int)	int	NOT NULL	Yes	No		The identifier of a NODE-ASSOCIATION-REQUIREMENT for a specific NODE-ASSOCIATION and a specific REQUIREMENT.	
NODE-ASSOCIATION-INTEROPERABILITY-REQUIREMENT	NODE-ASSOCIATION-INTEROPERABILITY-REQUIREMENT Role Code	NAREQ_role_cd	Code, smallint	smallint	NULL	No	No		The code that designates the specific way in which a NODE-ASSOCIATION is cited for a REQUIREMENT.	1 = Primary; 2 = Secondary; 3 = Tertiary; 4 = Other; 8 = Not specified; 9 = Not known.
NODE-ASSOCIATION-NETWORK	NODE-ASSOCIATION-INTEROPERABILITY-REQUIREMENT Identifier	NTWK_id	Id(int)	int	NOT NULL	Yes	Yes		The unique identifier of a specific NETWORK.	
NODE-ASSOCIATION-NETWORK	Node 1 NODE Identifier	Node_1_NODE_id	Id(int)	int	NOT NULL	Yes	Yes		The unique identifier of a specific NODE.	
NODE-ASSOCIATION-NETWORK	Node 2 NODE Identifier	Node_2_NODE_id	Id(int)	int	NOT NULL	Yes	Yes		The unique identifier of a specific NODE.	
NODE-ASSOCIATION-NETWORK	NODE-ASSOCIATION Identifier	NA_ID	Id(int)	int	NOT NULL	Yes	Yes		The identifier of a NODE-ASSOCIATION for a specific Node 1 NODE and a specific Node 2 NODE.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
NODE-COMMUNICATION-MEDIUM	COMMUNICATION-MEDIUM Identifier	COMM_MED_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific COMMUNICATION-MEDIUM.	
NODE-COMMUNICATION-MEDIUM	NODE Identifier	NODE_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
NODE-COMMUNICATION-MEDIUM	NODE-COMMUNICATION-MEDIUM Identifier	NODEC_M_id	Id(int)	int	NOT NULL	Yes	No	The unique identifier of a specific NODE-COMMUNICATION-MEDIUM for a specific NODE and a specific COMMUNICATION-MEDIUM.	
NODE-COMMUNICATION-MEDIUM	NODE-COMMUNICATION-MEDIUM Service Code	NODEC_M_svc_cd	Code_smallint	smallint	NULL	No	No	The code that represents a class of service for a specific NODE-COMMUNICATION-MEDIUM.	1 = Voice, 2 = Data (bit stream), 3 = Text (ASCII string), 4 = Imagery, 5 = Video, 8 = Not applicable, 9 = Not known.
NODE-COMMUNICATION-MEDIUM	Standard Agreement Identifier	Std_AGR_id	Id(int)	int	NULL	No	Yes	(12495) (A) THE IDENTIFIER THAT REPRESENTS AN AGREEMENT.	
NODE-COMMUNICATION-MEDIUM	SYSTEM Identifier	SYS_id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
NODE-DATA-ITEM-TYPE	DATA-ITEM-TYPE Identifier	DIT_id	Id(int)	int	NOT NULL	Yes	Yes	The identifier that represents a specific DATA-ITEM-TYPE.	Primary key was formerly DATA-ITEM-TYPE Code.
NODE-DATA-ITEM-TYPE	NODE Identifier	NODE_ID	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
NODE-HIERARCHY	Node Hierarchy NODE-ASSOC Group Id	NA_ID	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
NODE-HIERARCHY	NODE-HIERARCHY Relation Type Code	NH_REL_TN_TY_CD	Code_smallint	smallint	NULL	No	No	The code that denotes a specific class of relation for a NODE-HIERARCHY.	1--Command Relationship; 2--Coordination Relationship (often denoted by dotted lines in an organization chart); 3--Back-up Relationship; 4--Has as a component; 8--Not specified; 9--Not known. (added for CADM 2.0).
NODE-HIERARCHY	NODE-HIERARCHY Restriction Code	NH_rstrc_cd	String	char(2)	NULL	No	No	The code that denotes the limitation of a NODE-HIERARCHY.	DC--Direct/Command; 1--Indirect; SD--Situation dependent; 98--Not applicable; 99--Not known. To be added for CADM 2.0: 01--IS IN DIRECT SUPPORT OF; 02--IS IN GENERAL SUPPORT OF; 03--IS IN GENERAL SUPPORT/REINFORCING OF; 04--IS REINFORCING; 05--HAS OPERATIONAL CONTROL (OPCON) OVER; 06--HAS TACTICAL CONTROL (TACON) OVER; 07--IS ATTACHED TO; 08--IS AN ALTERNATE FOR; 09--HAS FULL COMMAND OVER; 10--HAS OPERATIONAL COMMAND (OPCOM) OVER; 11--PROVIDES LOGISTICS SERVICES TO; 12--IS IN RESERVE TO; 13--HAS TACTICAL COMMAND OF; 14--IS UNDER COMMAND FOR ADMINISTRATION (UCADMIN) from ORGANIZATION-ASSOCIATION Type Code (DoD and C2 Core Data Models); 15--Combat Command (COCOM) (from Joint Staff Officer's Guide, 1993)
NODE-LINK	CAVEATED-SECURITY-CLASSIFICATION IDENTIFIER	CSC_ID	Id(int)	int	NULL	No	Yes	(16225/1) (A) THE IDENTIFIER OF A CAVEATED-SECURITY-CLASSIFICATION. NOTE: BLOCKS OF IDENTIFIERS WILL BE ALLOCATED TO DEFENSE ORGANIZATIONS. IT WILL BE UP TO EACH DEFENSE ORGANIZATION TO ALLOCATE AND CONFIGURATION MANAGE ITS OWN IDENTIFIERS.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
NODE-LINK	ICON-CATALOG Identifier	ICONCAT_id	Id(int)	int	NULL	No	Yes	The identifier of a specific instance of ICON-CATALOG.	
NODE-LINK	Node 1 NODE Identifier	Node_1_NODE_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
NODE-LINK	Node 2 NODE Identifier	Node_2_NODE_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
NODE-LINK	NODE-ASSOCIATION Identifier	NA_ID	Id(int)	int	NOT NULL	Yes	Yes	The identifier of a NODE-ASSOCIATION for a specific Node 1 NODE and a specific Node 2 NODE.	
NODE-LINK	NODE-LINK Category Code	NL_cat_code	Code_smallint	smallint	NULL	No	No	The class of a specific NODE-LINK. 1--Node Hierarchy, 2--Node Link, 8--Not applicable, 9--Not known.	
NODE-LINK	NODE-LINK Comment Text	NL_cmt_text	Text(255)	varchar(255)	NULL	No	No	The text that amplifies the capabilities of a specific NODE-LINK.	
NODE-LINK	NODE-LINK Information Exchange Size Text	NL_inexchange_size_text	String	varchar(100)	NULL	No	No	The text that characterizes the amount of data contained in a typical set of information subject to exchange between two specific NODEs.	
NODE-LINK	NODE-LINK Interoperability Level Code	NL_interop_lv_cd	String	char(1)	NULL	No	No	The code that designates the applicable kind of interoperability specified in the C4ISR Architecture Framework. A--Universal (Virtual C4I System) Interoperability; B--Advanced (Integrated Systems) Interoperability; C--Intermediate (Distributed Systems) Interoperability; D--Basic (Discrete Systems Interaction) Interoperability. [Levels of Information System Interoperability, C4ISR Architecture Framework, Version 1]. Added for ASA: N--Not specified; X--Not known.	
NODE-LINK	NODE-LINK Physical Connection Indicator Code	NL_phys_cn_ind_cd	Code_smallint	smallint	NULL	No	No	The code that denotes whether a NODE-LINK is notional or represents a real instance. 1--Notional; 2--Real; 8--Not specified; 9--Not known.	
NODE-LINK	SECURITY-CLASSIFICATION CODE	SC_cd	Code_smallint	smallint	NULL	No	Yes	(26900/3) (A) THE CODE THAT REPRESENTS A SECURITY-CLASSIFICATION. (DDDS, 10 August 2000) 01 = CONFIDENTIAL; 02 = CONFIDENTIAL RESTRICTED; 03 = FOR OFFICIAL USE ONLY; 04 = NATO CONFIDENTIAL; 05 = NATO CONFIDENTIAL ATOMAL; 06 = NATO RESTRICTED; 07 = NATO SECRET; 08 = NATO SECRET ATOMAL; 09 = NATO TOP SECRET; 10 = NATO TOP SECRET ATOMAL; 11 = SECRET; 12 = SECRET RESTRICTED; 13 = TOP SECRET; 14 = UNCLASSIFIED; 15 = UNCLASSIFIED SENSITIVE; 98 = NOT SPECIFIED; 99 = NOT KNOWN (DDDS, 10 August 2000)	
NODE-LINK-CAPABILITY	CAPABILITY IDENTIFIER	CAP_id	Id(int)	int	NOT NULL	Yes	Yes	The following instances of CAPABILITY are needed: Mean Time Between Failures, Mean Time Between Software Faults, Availability, System Initialization Time, Data Transfer Rate, Program Restart Time, Data Throughput/Capacity, Input Type Response Time, Operator Interaction Type Response Time. [10-character (max) string]	
NODE-LINK-CAPABILITY	Node Link NODE-ASSOCIATION Group Identifier	NA_ID	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
NODE-LINK-CAPABILITY	NODE-LINK-CAPABILITY Identifier	NDLC_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a specific NODE-LINK-CAPABILITY for a specific NODE-LINK and a specific CAPABILITY.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
NODE-LINK-CAPABILITY	NODE-LINK-CAPABILITY Quantity	NDLC_qty	Numb er, Real	float	NULL	No	No	The amount of a specific CAPABILITY that applies to a specific NODE-LINK in a NODE-LINK-CAPABILITY.	
NODE-LINK-COMMUNICATIO N-MEDIUM	COMMUNICATIO N-MEDIUM Identifier	COMM_MED_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific COMMUNICATION-MEDIUM.	
NODE-LINK-COMMUNICATIO N-MEDIUM	Communications System SYSTEM Identifier	SYS_id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
NODE-LINK-COMMUNICATIO N-MEDIUM	Message Standard AGREEMENT Identifier	Msg_Std _AGR_id	Id(int)	int	NULL	No	Yes	(12495) (A) THE IDENTIFIER THAT REPRESENTS AN AGREEMENT.	
NODE-LINK-COMMUNICATIO N-MEDIUM	Node Link NODE-ASSOCIATION Group Identifier	NA_ID	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
NODE-LINK-COMMUNICATIO N-MEDIUM	NODE-LINK-COMM-MED Operational State Indicator Code	NLCM_op _ste_in d_cd	Code_smallint	smallint	NULL	No	No	The specification of whether a specific NODE-LINK-COMMUNICATION-MEDIUM is for normal or stressed operations.	1--Actively provides; 2--Available on request; 3--Planned; 8--Not specified; 9--Not known.
NODE-LINK-COMMUNICATIO N-MEDIUM	NODE-LINK-COMMUNICATIO N-MEDIUM Identifier	NLCM_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a NODE-LINK-COMMUNICATION-MEDIUM for a specific NODE-LINK and a specific COMMUNICATION-MEDIUM.	
NODE-MATERIEL	MATERIEL IDENTIFIER	MAT_id	Id(int)	int	NOT NULL	Yes	Yes	(11182) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC INSTANCE OF MATERIEL.	
NODE-MATERIEL	NODE Identifier	NODE_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
NODE-MATERIEL	NODE-MATERIEL Identifier	NODE_MAT_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a NODE-MATERIEL for a specific NODE and a specific instance of MATERIEL.	
NODE-MATERIEL	NODE-MATERIEL Role Code	NODE_MAT_role_cd	Code_smallint	smallint	NULL	No	No	The code that represents the specific way in which the MATERIEL is related to the NODE.	1--depicts; 8--Not specified; 9--Not known..
NODE-MISSION-AREA	MISSION-AREA TYPE CODE	MA_ty_cd	Code_smallint	smallint	NOT NULL	Yes	Yes	(16078) (A) THE CODE THAT DENOTES A CLASS OF MISSION-AREA.	01--MOBILIZATION; 02--INTELLIGENCE; 03--EMPLOYMENT; 04--SEARCH AND RESCUE; 05--CONSTRUCTION; 06--AMPHIBIOUS WARFARE; 07--ANTI-AIR WARFARE; 08--SPECIAL OPERATIONS; 09--PSYCHOLOGICAL OPERATIONS; 10--CIVIL AFFAIRS. Additions from Naval Architecture Database: 11--AMPH--Amphibious Warfare; 12--STRK--Strike Warfare; 13--UNSW--Undersea Warfare; 14--MINE--Mining Warfare; 15--TAD--Theater Air Defense; 16--ISR--Intelligence Surveillance & Reconnaissance; 17--AIR--Air Warfare; 18--SURF--Surface Warfare. - Other additions: 19--C2--Command and Control; 20--FS--Fire Support; 21--IW--Information Warfare; 22--LOG--Logistics; 23--MAR--Maritime (General); 24--MVR--Maneuver and Land Warfare; 25--C2W--Command and Control Warfare; 26--OCA--Offensive Counter Air; 27--DCA--Defense Counter Air; 28--AIRC--Airspace Control; 29--INT--Interdiction; 30--EW--Electronic Warfare.

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
NODE-MISSION-AREA	NODE Identifier	NODE_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
NODE-MISSION-AREA	NODE-MISSION-AREA Role Code	NODEM_A_role_cd	Code_smallint	smallint	NULL	No	No	The code that designates the specific way in which a MISSION-AREA is cited for a NODE.	1 = Support network capabilities for; 2 = Supports systems capabilities for; 3 = Supports organization structuring for; 8 = Not specified; 9 = Not known.
NODE-ORGANIZATION	NODE Identifier	NODE_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
NODE-ORGANIZATION	NODE-ORGANIZATION Description Text {JCAPS}	NODE_ORG_desc_r_tx	String	varchar(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A COMMAND-CONTROL-ELEMENT-ORGANIZATION.	Source: JCAPS 2.1 (C2E_DSC_TX).
NODE-ORGANIZATION	NODE-ORGANIZATION Identifier	NODE_ORG_id	Id(int)	int	NOT NULL	Yes	No	The unique identifier of a specific NODE-ORGANIZATION for a specific NODE and a specific ORGANIZATION.	
NODE-ORGANIZATION	NODE-ORGANIZATION Role Code	NODE_ORG_role_cd	Code_smallint	smallint	NULL	No	No	The code that designates the specific way in which an ORGANIZATION is cited for a NODE.	1--Is a site of operations for; 2--Is maintained by; 3--Is an address for; 4--Is supported by; 5--Is set up by; 6--Is required to support; 8--Not specified; 9--Not known. Added in review: 7--Represents.
NODE-ORGANIZATION	ORGANIZATION IDENTIFIER	ORG_id	Id(int)	int	NOT NULL	Yes	Yes	THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	
NODE-ORGANIZATION-TYPE	NODE Identifier	NODE_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
NODE-ORGANIZATION-TYPE	NODE-ORGANIZATION-TYPE Identifier	NODE_ORG_id	Id(int)	int	NOT NULL	Yes	No	The unique identifier of a specific NODE-ORGANIZATION-TYPE for a specific NODE and a specific ORGANIZATION-TYPE.	
NODE-ORGANIZATION-TYPE	NODE-ORGANIZATION-TYPE Role Code	NODE_ORG_role_cd	Code_smallint	smallint	NULL	No	No	The code that designates the specific way in which an ORGANIZATION-TYPE is cited for a NODE.	1--Represents; 2--Is location for; 3--Supports; 4--Is managed by; 5--Is maintained by; 6--Is installed by; 8--Not specified; 9--Not known.
NODE-ORGANIZATION-TYPE	ORGANIZATION-TYPE IDENTIFIER	ORG_id	Id(int)	int	NOT NULL	Yes	Yes	(11184) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC ORGANIZATION-TYPE.	
NODE-PROCESS-ACTIVITY	NODE Identifier	NODE_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
NODE-PROCESS-ACTIVITY	NODE-PROCESS-ACTIVITY Identifier	NODE_P_A_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a specific NODE-PROCESS-ACTIVITY for a specific NODE and a specific PROCESS-ACTIVITY.	
NODE-PROCESS-ACTIVITY	NODE-PROCESS-ACTIVITY Role Code	NODE_P_A_role_cd	Code_smallint	smallint	NULL	No	No	The code that designates the specific way in which a PROCESS-ACTIVITY is cited for a NODE.	1--Is a site for; 2--Supports conduct of; 3--Represents; 8--Not specified; 9--Not known.

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
NODE-PROCESS-ACTIVITY	PROCESS-ACTIVITY IDENTIFIER	PA_id	Id(int)	int	NOT NULL	Yes	Yes	(29165/2) (A) THE IDENTIFIER THAT REPRESENTS A PROCESS-ACTIVITY.	
NODE-SYSTEM	NODE Identifier	NODE_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
NODE-SYSTEM	NODE-SYSTEM Abbreviated Name {JCAPS}	ND_SYS_abbr_nm	Name	varchar(50)	NULL	No	No	THE ABBREVIATION FOR A COMMAND AND CONTROL ELEMENT'S NAME.	Source: JCAPS 2.1 (SYS_ABBR_NM).
NODE-SYSTEM	NODE-SYSTEM Classification Code {JCAPS}	ND_SYS_cls_cd	Code_smallint	smallint	NULL	No	No	THE CODE THAT DENOTES THE LEVEL OF SECURITY CLASSIFICATION OF A SYSTEM. 1 = Confidential (C); 2 = For Official Use Only (FOUO); 3 = Secret (S); 4 = Sensitive But Unclassified (SBU); 5 = Sensitive Compartmented Information (SCI); 6 = Top Secret (TS); 7 = Top Secret/Sensitive Compartmented Information (TS/SCI); 8 = Unclassified (U). Source: JCAPS IDD for JCAPS 2.1 (SYS_CLS_CD).	
NODE-SYSTEM	NODE-SYSTEM Description Text {JCAPS}	ND_SYS_desc_tx	String	varchar(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A COMMAND AND CONTROL ELEMENT.	Source: JCAPS 2.1 (SYS_DSC_TX).
NODE-SYSTEM	NODE-SYSTEM Enhancement Description Text	ND_SYS_enh_desc_tx	Text(8000)	varchar(8000)	NULL	No	No	The text that summarizes a planned improvement for a specific NODE-SYSTEM.	
NODE-SYSTEM	NODE-SYSTEM Funding Source Text {JCAPS}	ND_SYS_fund_src_tx	String	varchar(2000)	NULL	No	No	The text that characterizes the way in which costs for a specific NODE-SYSTEM are paid.	Source: JCAPS 2.1 (SY_FUNDING_SOURCES).
NODE-SYSTEM	NODE-SYSTEM Hard Disk Capacity Text {JCAPS}	ND_SYS_hddsk_cp_tx	String	varchar(2000)	NULL	No	No	THE TEXT THAT DESCRIBES THE HARD DISK CAPACITY OF A SYSTEM.	Source: JCAPS 2.1 (SY_HRD_DSK_CP_TX).
NODE-SYSTEM	NODE-SYSTEM Identifier	ND_SYS_id	Id(int)	int	NOT NULL	Yes	No	The unique identifier of a specific NODE-SYSTEM for a specific NODE and a specific SYSTEM.	
NODE-SYSTEM	NODE-SYSTEM Implementation Version Description Text {JCAPS}	ND_SYS_impvr_d_s_tx	String	varchar(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A SPECIFIC VERSION OF A SPECIFIC IMPLEMENTATION OF A SYSTEM.	Source: JCAPS 2.1 (SY_IMP_VER_DTX).
NODE-SYSTEM	NODE-SYSTEM Implementation Version Name {JCAPS}	ND_SYS_impvr_nm	String	varchar(50)	NULL	No	No	THE NAME OF A SPECIFIC VERSION OF A SPECIFIC IMPLEMENTATION OF A SYSTEM.	Source: JCAPS 2.1 (SY_IMP_VER_NM).
NODE-SYSTEM	NODE-SYSTEM Implementation Version Operational Status Code {JCAPS}	ND_SYS_impvr_s_tx	Code_smallint	smallint	NULL	No	No	THE CODE THAT DENOTES THE OPERATIONAL STATUS OF A SPECIFIC VERSION OF A SPECIFIC IMPLEMENTATION OF A SYSTEM.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (SY_IMP_VER_OP_ST_CD).
NODE-SYSTEM	NODE-SYSTEM Information Assurance Text {JCAPS}	ND_SYS_info_ass_tx	String	varchar(50)	NULL	No	No	The text that characterizes the way in which the NODE-SYSTEM ensures that its data is protected from access to or change by an unauthorized source.	If coded, domain values would be the following: 1 = Administrative; 2 = Mission Critical; 3 = Mission Support; 8 = Not specified; 9 = Not known. Source: JCAPS IDD for JCAPS 2.1 (SY_INFO_ASSURE).

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
NODE-SYSTEM	NODE-SYSTEM Legacy Migration System Code {JCAPS}	ND_SYS_leg_mig_cd	Code_smallint	smallint	NULL	No	No	THE CODE THAT DENOTES WHETHER OR NOT THE SYSTEM IS A LEGACY SYSTEM TARGETED FOR MIGRATION.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (SY_LEG_MIG_CD).
NODE-SYSTEM	NODE-SYSTEM Memory Capacity Text {JCAPS}	ND_SYS_mem_cp_tx	String	varchar(2000)	NULL	No	No	THE TEXT THAT DESCRIBES THE MEMORY CAPACITY OF A SYSTEM.	Source: JCAPS 2.1 (SY_MEM_CP_TX).
NODE-SYSTEM	NODE-SYSTEM Mobility Code {JCAPS}	ND_SYS_mbl_cd	Code_smallint	smallint	NULL	No	No	THE CODE THAT DENOTES WHETHER OR NOT A SYSTEM IS MOBILE.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (SY_MBL_CD).
NODE-SYSTEM	NODE-SYSTEM Name {JCAPS}	ND_SYS_nm	String	varchar(250)	NULL	No	No	The name of a specific NODE-SYSTEM.	Source: JCAPS 2.1 (SYS_NAME).
NODE-SYSTEM	NODE-SYSTEM Network Address Text {JCAPS}	ND_SYS_nw_addr_tx	String	varchar(2000)	NULL	No	No	THE TEXT THAT REPRESENTS THE NETWORK ADDRESS OF A SYSTEM.	Source: JCAPS 2.1 (SY_NW_ADDR_TX).
NODE-SYSTEM	NODE-SYSTEM Network Interface Description Text {JCAPS}	ND_SYS_nw_intf_tx	String	varchar(2000)	NULL	No	No	THE TEXT THAT DESCRIBES THE NETWORK INTERFACE OF A SYSTEM.	Source: JCAPS 2.1 (SY_NW_INT_DTX).
NODE-SYSTEM	NODE-SYSTEM Network Interface Identifier {JCAPS}	ND_SYS_nw_intf_id	String	varchar(50)	NULL	No	No	THE IDENTIFIER THAT REPRESENTS THE NETWORK INTERFACE OF A SYSTEM.	Source: JCAPS 2.1 (SY_NW_INT_ID).
NODE-SYSTEM	NODE-SYSTEM Normal Use Days Quantity {JCAPS}	ND_SYS_nmuse_da_qy	Number	float	NULL	No	No	The number of days in a typical week that a NODE-SYSTEM is typically active.	Source: JCAPS 2.1 (SY_NRM_USE_DAYS).
NODE-SYSTEM	NODE-SYSTEM Normal Use Hours Quantity {JCAPS}	ND_SYS_nmuse_hr_qy	Number	float	NULL	No	No	The number of hours in a typical day that a NODE-SYSTEM is active.	Source: JCAPS 2.1 (SYS_NRM_USE_HRS).
NODE-SYSTEM	NODE-SYSTEM Peak Use Days Quantity {JCAPS}	ND_SYS_pkuse_da_qy	Number	float	NULL	No	No	The number of days in the week of greatest employment that a NODE-SYSTEM is typically active.	Source: JCAPS 2.1 (SY_PEAK_USE_DAYS).
NODE-SYSTEM	NODE-SYSTEM Peak Use Hours Quantity {JCAPS}	ND_SYS_pkuse_hr_qy	Number	float	NULL	No	No	The number of hours in the day of greatest employment that a NODE-SYSTEM is active.	Source: JCAPS 2.1 (SY_PEAK_USE_HRS).
NODE-SYSTEM	NODE-SYSTEM Role Code	ND_SYS_role_cd	Code_smallint	smallint	NULL	No	No	The code that designates the specific way in which a SYSTEM is cited for a NODE.	1--Represents; 2--Is location for; 3--Supports; 4--Is an address for; 8--Not specified; 9--Not known.
NODE-SYSTEM	NODE-SYSTEM Security Provisions Text {JCAPS}	ND_SYS_scty_pr_tx	String	varchar(250)	NULL	No	No	The text that characterizes the protection available to the NODE-SYSTEM.	Source: JCAPS 2.1 (SY_SEC_PROVID).
NODE-SYSTEM	NODE-SYSTEM Services Provided Text {JCAPS}	ND_SYS_srv_pr_tx	Name	varchar(50)	NULL	No	No	The text that characterizes the primary technical services other than security available to the NODE-SYSTEM.	Text may include one or more of the following: Data, Distance Learning, Imaging, Messaging, Other, Simulation, Video, Voice. Source: JCAPS IDD for JCAPS 2.1 (SY_SRV_PROVIDED).

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
NODE-SYSTEM	NODE-SYSTEM Services Remarks Text {JCAPS}	ND_SYS_srv_rmk_s_tx	String	varchar(250)	NULL	No	No	The text that comments on the entire set of services available to the NODE-SYSTEM.	Source: JCAPS 2.1 (SY_SRV_RMKs).
NODE-SYSTEM	NODE-SYSTEM Status Code {JCAPS}	ND_SYS_sta_cd	Code_smallint	smallint	NULL	No	No	THE CODE THAT DENOTES THE CURRENT STATUS OF A SYSTEM.	1 = Operational; 2 = Under Test; 3 = Under Development; 4 = Planned; 5 = Proposed; 6 = Other; 8 = Not specified; 9 = Not known. Source: JCAPS IDD for JCAPS 2.1 (SY_STAT_CD).
NODE-SYSTEM	NODE-SYSTEM Supplementary Services Provided Text {JCAPS}	ND_SYS_supsrv_r_tx	Name	varchar(50)	NULL	No	No	The text that characterizes the secondary technical services other than security available to the NODE-SYSTEM.	Text may include one or more of the following: 24X7 (24 hours per day, 7 days per week), 5X8 (5 days per week, 8 hours per day), On-Site Technician, On-Call Technician, Other (include in Remarks) . Source: JCAPS IDD for JCAPS 2.1 (SY_SUP_SRV_PROVIDED).
NODE-SYSTEM	NODE-SYSTEM Transmission Classification Code {JCAPS}	ND_SYS_xmt_cls_cd	Code_smallint	smallint	NULL	No	No	The text that characterizes the highest level of security that applies to incoming and outgoing communications for a NODE-SYSTEM.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (SY_XMT_CLS_CD).
NODE-SYSTEM	NODE-SYSTEM Identifier	SYS_id	Id(int)	int	NOT NULL	Yes	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
NODE-SYSTEM-ASSET-OWNERSHIP {JCAPS}	NODE Identifier	NODE_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NODE.	
NODE-SYSTEM-ASSET-OWNERSHIP {JCAPS}	NODE-SYSTEM Identifier	ND_SYS_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NODE-SYSTEM for a specific NODE and a specific SYSTEM.	
NODE-SYSTEM-ASSET-OWNERSHIP {JCAPS}	NODE-SYSTEM-ASSET-OWNERSHIP Identifier {JCAPS}	NDSYSA_O_id	Id(int)	int	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS AN INSTANCE OF NODE-SYSTEM-ASSET-OWNERSHIP.	Source: JCAPS 2.1 (ASSET_OWN_ID).
NODE-SYSTEM-ASSET-OWNERSHIP {JCAPS}	NODE-SYSTEM-ASSET-OWNERSHIP Percent Owned Quantity {JCAPS}	NDSYSA_O_pcnt_wn_rt	Numb er	float	NULL	No	No	THE PERCENTAGE OF THE PARTICULAR TYPE OF OWNERSHIP	Expressed as a percent. Source: JCAPS 2.1 (AO_PERCENT).
NODE-SYSTEM-ASSET-OWNERSHIP {JCAPS}	NODE-SYSTEM-ASSET-OWNERSHIP Type Code {JCAPS}	NDSYSA_O_ty_cd	Code_smallint	smallint	NULL	No	No	THE TYPE OF OWNERSHIP	Domain is TBD from JCAPS. Source: JCAPS 2.1 (AO_OWNERSHIP).
NODE-SYSTEM-ASSET-OWNERSHIP {JCAPS}	NODE-SYSTEM Identifier	SYS_id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
NODE-SYSTEM-ASSOCIATION {JCAPS}	Child NODE Identifier	Chld_NO_DE_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
NODE-SYSTEM-ASSOCIATION {JCAPS}	Child NODE-SYSTEM Identifier	Child_ND_SYS_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE-SYSTEM for a specific NODE and a specific SYSTEM.	
NODE-SYSTEM-ASSOCIATION {JCAPS}	Child SYSTEM Identifier	Child_SYS_id	Id(int)	int	NOT NULL	Yes	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
NODE-SYSTEM-ASSOCIATION {JCAPS}	NODE-SYSTEM-ASSOCIATION Description Text {JCAPS}	NDSYS_descrx	String	varchar(2000)	NULL	No	No	THE TEXT THAT DESCRIBES THE NATURE OF THE ASSOCIATION BETWEEN TWO NODE-SYSTEMS.	Source: JCAPS 2.1 (SY_ASN_DSC_TX).
NODE-SYSTEM-ASSOCIATION {JCAPS}	NODE-SYSTEM-ASSOCIATION Identifier {JCAPS}	NDSYS_id	Id(int)	int	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A SYSTEM-ASSOCIATION.	Source: JCAPS 2.1 (SY_ANS_ID).
NODE-SYSTEM-ASSOCIATION {JCAPS}	NODE-SYSTEM-ASSOCIATION Interface Type Code {JCAPS}	NDSYS_intf_ty_cd	Code_smallint	smallint	NULL	No	No	THE CODE THAT DESIGNATES THE CLASS OF INTEROPERATING RELATIONSHIP BETWEEN TWO SYSTEMS IN A SYSTEM-ASSOCIATION.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (SY_INTF_TY_CD).
NODE-SYSTEM-ASSOCIATION {JCAPS}	NODE-SYSTEM-ASSOCIATION Interoperability Level Code {JCAPS}	NDSYS_intoplvl_cd	Code_smallint	smallint	NULL	No	No	THE CODE THAT DESIGNATES THE APPLICABLE KIND OF INTEROPERABILITY BETWEEN TWO NODE-SYSTEMS.	Domain is TBD from LISI or JCAPS. Source: JCAPS 2.1 (SY_ASN_INTROP_LVL_CD).
NODE-SYSTEM-ASSOCIATION {JCAPS}	NODE-SYSTEM-ASSOCIATION Name {JCAPS}	NDSYS_nm	String	varchar(250)	NULL	No	No	THE NAME OF A SYSTEM ASSOCIATION.	Source: JCAPS 2.1 (SY_ASN_NM).
NODE-SYSTEM-ASSOCIATION {JCAPS}	NODE-SYSTEM-ASSOCIATION Relationship Type Code {JCAPS}	NDSYS_rel_ty_cd	Code_smallint	smallint	NULL	No	No	The code that denotes the class of relationship between the Parent NODE-SYSTEM and the Child NODE-SYSTEM.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (REL_TYPE).
NODE-SYSTEM-ASSOCIATION {JCAPS}	NODE-SYSTEM-ASSOCIATION Type Code {JCAPS}	NDSYS_ty_cd	Code_smallint	smallint	NULL	No	No	THE CODE THAT DENOTES THE KIND OF NODE-SYSTEM-ASSOCIATION.	1--Is a revision of; 2--Is an upgrade planned for; 3--Migrates from; 4--Replaces; 5--Is installed in; 6--Interfaces with; 7--Is a client for; 8--Is a server for; 9--Is an operating system for; 10--Provides office automation for; 11--Is a subsystem of; 12--Is a component of; 13--Ordinate is initiator and subordinate is receptor in; 98--Not specified; 99--Not known (added for CADM 2.0). Note: The Ordinate SYSTEM is the "target" system (the end result). Domain source: Army CADM Domain values for SYSTEM-ASSOCIATION Type Code. Source of Requirement: JCAPS 2.1 (SY_ASN_TY_CD).
NODE-SYSTEM-ASSOCIATION {JCAPS}	Parent NODE Identifier	Par_NO_DE_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
NODE-SYSTEM-ASSOCIATION {JCAPS}	Parent NODE-SYSTEM Identifier	Par_ND_SYS_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE-SYSTEM for a specific NODE and a specific SYSTEM.	
NODE-SYSTEM-ASSOCIATION {JCAPS}	Parent SYSTEM Identifier	Par_SYS_id	Id(int)	int	NOT NULL	Yes	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
NODE-SYSTEM-COST-MANAGEMENT {JCAPS}	NODE Identifier	NODE_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NODE.	
NODE-SYSTEM-COST-MANAGEMENT {JCAPS}	NODE-SYSTEM Identifier	ND_SYS_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific NODE-SYSTEM for a specific NODE and a specific SYSTEM.	
NODE-SYSTEM-COST-MANAGEMENT {JCAPS}	NODE-SYSTEM-COST-Amount	NDSYS M_amt	Money	money	NULL	No	No	THE DOLLAR AMOUNT ASSOCIATED WITH THE NODE-SYSTEM-COST-MANAGEMENT DATA	Unit is dollars. Source: JCAPS 2.1 (CM_AMOUNT).
NODE-SYSTEM-COST-MANAGEMENT {JCAPS}	NODE-SYSTEM-COST-Amount	NDSYS M_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a specific instance of NODE-SYSTEM-COST-MANAGEMENT.	Source: JCAPS 2.1 (COST_MAN_ID).
NODE-SYSTEM-COST-MANAGEMENT {JCAPS}	NODE-SYSTEM-COST-Type Code	NDSYS M_ty_cd	Code_smallint	smallint	NULL	No	No	THE TYPE OF NODE-SYSTEM-COST-MANAGEMENT DATA	1 = Direct; 2 = Defense Working Capital Fund (DWCF); 8 = Not specified; 9 = Not known. Source: JCAPS IDD for JCAPS 2.1 (CM_TYPE).
NODE-SYSTEM-COST-MANAGEMENT {JCAPS}	NODE-SYSTEM-COST-Year Quantity	NDSYS M_year_qy	Number	int	NULL	No	No	THE CALENDAR YEAR WHICH APPLIES TO THE NODE-SYSTEM-COST-MANAGEMENT DATA	Source: JCAPS 2.1 (CM_YEAR).
NODE-SYSTEM-COST-MANAGEMENT {JCAPS}	NODE-SYSTEM-COST-SYSTEM Identifier	SYS_id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
NODE-SYSTEM-COST-MANAGEMENT {JCAPS}	NODE Identifier	NODE_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
NODE-SYSTEM-COST-MANAGEMENT {JCAPS}	NODE-SYSTEM Identifier	ND_SYS_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE-SYSTEM for a specific NODE and a specific SYSTEM.	
NODE-SYSTEM-COST-MANAGEMENT {JCAPS}	Software Item MATERIEL-ITEM Identifier	MATL_id	Id(int)	int	NOT NULL	Yes	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	
NODE-SYSTEM-COST-MANAGEMENT {JCAPS}	SYSTEM Identifier	SYS_id	Id(int)	int	NOT NULL	Yes	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
NODE-SYSTEM-COST-MANAGEMENT {JCAPS}	NODE Identifier	NODE_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
NODE-SYSTEM-COST-MANAGEMENT {JCAPS}	NODE-SYSTEM Identifier	ND_SYS_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE-SYSTEM for a specific NODE and a specific SYSTEM.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
NODE-SYSTEM-TRANSMISSION {JCAPS}	NODE-SYSTEM-TRANSMISSION Antenna Type Name {JCAPS}	SYSXM_antn_ty_nm	String	varchar(50)	NULL	No	No	The name of the class of antenna primary used by a specific NODE-SYSTEM for data communications.	If coded, domain values might be the following: 1 = Collinear Array; 2 = Conical; 3 = Conifan; 4 = Dipole; 5 = Discone; 6 = Helical; 7 = Horn; 8 = Inverted L; 9 = Log Periodic; 10 = Loop; 11 = Monopole; 12 = Other; 13 = Parabolic; 14 = Phased Array; 15 = Reflector Array; 16 = Rhombic; 17 = Sloping Long Wire; 18 = Sloping V; 19 = Slotted Waveguide; 20 = Spiral; 21 = Umbrella; 22 = Unknown; 23 = Whip; 24 = Yagi; 98 = Not Specified; 99 = Not Known. Source: JCAPS IDD for JCAPS 2.1 (ANTN_TY_NM).
NODE-SYSTEM-TRANSMISSION {JCAPS}	NODE-SYSTEM-TRANSMISSION Channel Quantity {JCAPS}	SYSXM_chnl_qty	Number	float	NULL	No	No	The number of channels used by a specific NODE-SYSTEM for data communications.	Source: JCAPS 2.1 (NUM_CHANNELS).
NODE-SYSTEM-TRANSMISSION {JCAPS}	NODE-SYSTEM-TRANSMISSION Communication Mode Code {JCAPS}	SYSXM_comm_mode_cd	Code_smallint	smallint	NULL	No	No	The code that represents the class of data communications used by a specific NODE-SYSTEM.	1 = Burst; 2 = Full Duplex; 3 = Half Duplex; 4 = Not Applicable; 5 = Other; 6 = Selectable; 7 = Simplex; 8 = Not specified; 9 = Not known. Source: JCAPS IDD for JCAPS 2.1 (COMM_MODE).
NODE-SYSTEM-TRANSMISSION {JCAPS}	NODE-SYSTEM-TRANSMISSION Data Rate {JCAPS}	SYSXM_data_rt	Number	float	NULL	No	No	The most common rate at which the information content in a specific NODE-SYSTEM is conveyed in data communications.	Unit is bits per second. Source: JCAPS 2.1 (DATA_RATE).
NODE-SYSTEM-TRANSMISSION {JCAPS}	NODE-SYSTEM-TRANSMISSION Overhead Rate {JCAPS}	SYSXM_ovhd_rt	Number	float	NULL	No	No	The most common rate at which security, error checking, error correction, and other non-information-content data is conveyed in data communications for a specific NODE-SYSTEM.	Unit is TBD from JCAPS. Source: JCAPS 2.1 (OH_RATE).
NODE-SYSTEM-TRANSMISSION {JCAPS}	NODE-SYSTEM-TRANSMISSION Receive Frequency Display Unit Code {JCAPS}	SYSXM_rx_freqn_cd	Code_smallint	smallint	NULL	No	No	The code that represents the units of measure adopted for user displays of the frequency that is employed for incoming traffic in data communications for a specific NODE-SYSTEM.	1 = Hz; 2 = kHz; 3 = mHz; 4 = GHz; 8 = Not specified; 9 = Not known. Domain detail is TBD from JCAPS. Source: JCAPS 2.1 (RX_FREQ_DISP_UNITS).
NODE-SYSTEM-TRANSMISSION {JCAPS}	NODE-SYSTEM-TRANSMISSION Receive Frequency Rate {JCAPS}	SYSXM_rx_freq_rt	Number	float	NULL	No	No	The most common frequency that is used for incoming traffic in data communications for a specific NODE-SYSTEM.	Unit is Hz. Source: JCAPS 2.1 (RX_FREQ_HZ).
NODE-SYSTEM-TRANSMISSION {JCAPS}	NODE-SYSTEM-TRANSMISSION Transmit Frequency Display Unit Code {JCAPS}	SYSXM_tx_freqn_cd	Code_smallint	smallint	NULL	No	No	The code that represents the units of measure adopted for user displays of the frequency that is employed for outgoing traffic in data communications for a specific NODE-SYSTEM.	1 = Hz; 2 = kHz; 3 = mHz; 4 = GHz; 8 = Not specified; 9 = Not known. Domain detail is TBD from JCAPS. Source: JCAPS 2.1 (TX_FREQ_DISP_UNITS).
NODE-SYSTEM-TRANSMISSION {JCAPS}	NODE-SYSTEM-TRANSMISSION Transmit Frequency Rate {JCAPS}	SYSXM_tx_freq_rt	Number	float	NULL	No	No	The most common frequency that is used for outgoing traffic in data communications for a specific NODE-SYSTEM.	Unit is Hz. Source: JCAPS 2.1 (TX_FREQ_HZ).

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
NODE-SYSTEM-TRANSMISSION (JCAPS)	SYSTEM Identifier	SYS_id	Id(int)	int	NOT NULL	Yes	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
NODE-TASK	NODE Identifier	NODE_id	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
NODE-TASK	NODE-TASK Identifier	NODE_TSK_id	Id(int)	int	NOT NULL	Yes	No	The unique identifier of a specific NODE-TASK for a specific NODE and a specific TASK.	
NODE-TASK	NODE-TASK Role Code	NODE_TSK_role_cd	Code_smallint	smallint	NULL	No	No	The code that designates a specific way in which a TASK is performed at a NODE in a NODE-TASK.	1--Represents; 2--Is site for; 3--Supports conduct of; 8--Not specified; 9--Not known.
NODE-TASK	TASK IDENTIFIER	TSK_id	Id(int)	int	NOT NULL	Yes	Yes	(9282) (A) THE IDENTIFIER THAT REPRESENTS A TASK.	
NODE-TREE	DOCUMENT IDENTIFIER	DOC_ID	Id(int)	int	NOT NULL	Yes	Yes	(9643/2) (A) THE IDENTIFIER THAT REPRESENTS A DOCUMENT.	
NODE-TREE-NODE-HIERARCHY	DOCUMENT IDENTIFIER	Node_Tree_DOC_id	Id(int)	int	NOT NULL	Yes	Yes	(9643/2) (A) THE IDENTIFIER THAT REPRESENTS A DOCUMENT.	
NODE-TREE-NODE-HIERARCHY	Node Hierarchy NODE-ASSOC Group Id	NA_ID	Id(int)	int	NOT NULL	Yes	Yes	The unique identifier of a specific NODE.	
OPERATIONAL-ARCHITECTURE	ARCHITECTURE Identifier	ARCH_id	Id(int)	int	NOT NULL	Yes	Yes	The identifier of a specific ARCHITECTURE.	
OPERATIONAL-ARCHITECTURE	MISSION IDENTIFIER	MSN_ID	Id(int)	int	NULL	No	Yes	(42143/1) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC MISSION.	
OPERATIONAL-ARCHITECTURE	OPERATIONAL-ARCHITECTURE Category Code	OPARC_H_cat_cd	Code_smallint	smallint	NULL	No	No	The code that designates a classification of OPERATIONAL-ARCHITECTURE.	1--Plan architecture; 2--Movement architecture; 8--Not specified; 9--Not known.
OPERATIONAL-MISSION-THREAD	CAVEATED-SECURITY-CLASSIFICATION IDENTIFIER	CSC_ID	Id(int)	int	NULL	No	Yes	(16225/1) (A) THE IDENTIFIER OF A CAVEATED-SECURITY-CLASSIFICATION. NOTE: BLOCKS OF IDENTIFIERS WILL BE ALLOCATED TO DEFENSE ORGANIZATIONS. IT WILL BE UP TO EACH DEFENSE ORGANIZATION TO ALLOCATE AND CONFIGURATION MANAGE ITS OWN IDENTIFIERS.	
OPERATIONAL-MISSION-THREAD	MISSION IDENTIFIER	MSN_ID	Id(int)	int	NULL	No	Yes	(42143/1) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC MISSION.	
OPERATIONAL-MISSION-THREAD	OPERATIONAL-MISSION-THREAD Description Text	OMTHR_D_desc_tx	Text(255)	varchar(255)	NULL	No	No	The text that summarizes a specific OPERATIONAL-MISSION-THREAD.	
OPERATIONAL-MISSION-THREAD	OPERATIONAL-MISSION-THREAD Identifier	OMTHR_D_id	Id(int)	int	NOT NULL	Yes	No	The identifier of an OPERATIONAL-MISSION-THREAD. Source: Army Systems Architecture Data Model.	
OPERATIONAL-MISSION-THREAD	OPERATIONAL-MISSION-THREAD Name	OMTHR_D_nm	Name	varchar(50)	NULL	No	No	The name of the OPERATIONAL-MISSION-THREAD. Source: Army Systems Architecture Data Model.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
OPERATIONAL- MISSION- THREAD	OPERATIONAL- MISSION- THREAD Record Lock Status Code	OMTHR D_rck_st a_cd	String	char(1)	NULL	No	No	The code that represents whether users other than the locking authority can change attribute values for a specific OPERATIONAL- MISSION-THREAD.	NULL = command post not restricted to read-only; 0-9, A-Z = the code of proponent who has limited the access to the command post as follows: 0 = TRADOC (TRADOC); 1 = JOINT (JOINT); 2 = Navy (NAVY); 3 = AIR FORCE (AF); 4 = MARINES (MARINES); 5 = North Atlantic Treaty Org (NATO); 6 = OPFAC Council of Colonels (OPFCOC); 7 = Combined (CMBND); 8 = Host Nation (HN); 9 = CASCOM Integrator (CASCOM INT); A = Armor (AR); B = Air Defense Artillery (ADA); C = Chemical (CHEM); D = Medical (MED); E = Engineer (ENG); F = Field Artillery (FA); G = Military Police (MP); H = Combined Arms Support Cmd (CASCOM); I = Infantry (INF); J = Military Intelligence (MI); K = Chaplain (CHAP); L = Legal (LEGAL); M = Modeling and Simulation (MODSIM); N = Special Operations Command (SF); O = Ordnance (ORD); P = Public Affairs Office (PAO); Q = Quartermaster (QM); R = C4RDP PM (C4RDP PM); S = Signal (SIG); T = Transportation (TRANS); U = Aviation/Aviation Log (AV/AV LOG); V = Missile Munitions (MSL MUN); X = Adjutant General (AG); Y = Finance (FIN); Z = Combined Arms Command (CAC). Source: C4RDP-Thread Locked-Status Code (No definition provided).
OPERATIONAL- MISSION- THREAD	OPERATIONAL- MISSION- THREAD Record Security- Classification Code	OMTHR D_rec_se cl_cd	Security- Classi fication	char(1)	NULL	No	No	The code that denotes the security classification of the metadata describing the OPERATIONAL- MISSION-THREAD.	U = Unclassified; C = Confidential; S = Secret. Source: C4RDP, Thread Security-Classification Code-The code that denotes the security classification of the metadata describing the Thread.
OPERATIONAL- MISSION- THREAD	OPERATIONAL- SCENARIO Identifier	OP_SCE N_id	Id(int)	int	NULL	No	Yes	The identifier of a specific OPERATIONAL-SCENARIO.	
OPERATIONAL- MISSION- THREAD	SECURITY- CLASSIFICATIO N CODE	SC_cd	Code_ small int	smallint	NULL	No	Yes	(26900/3) (A) THE CODE THAT REPRESENTS A SECURITY- CLASSIFICATION. (DDDS, 10 August 2000)	01 = CONFIDENTIAL; 02 = CONFIDENTIAL RESTRICTED; 03 = FOR OFFICIAL USE ONLY; 04 = NATO CONFIDENTIAL; 05 = NATO CONFIDENTIAL ATOMAL; 06 = NATO RESTRICTED; 07 = NATO SECRET; 08 = NATO SECRET ATOMAL; 09 = NATO TOP SECRET; 10 = NATO TOP SECRET ATOMAL; 11 = SECRET; 12 = SECRET RESTRICTED; 13 = TOP SECRET; 14 = UNCLASSIFIED; 15 = UNCLASSIFIED SENSITIVE; 98 = NOT SPECIFIED; 99 = NOT KNOWN (DDDS, 10 August 2000)
OPERATIONAL- MISSION- THREAD- ELEMENT	Info Exch Req GUIDANCE Identifier	InfoExcR eq_GUID _id	Id(int)	int	NULL	No	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
OPERATIONAL- MISSION- THREAD- ELEMENT	OPERATIONAL- MISSION- THREAD Identifier	OMTHR D_id	Id(int)	int	NOT NULL	Yes	Yes	The identifier of an OPERATIONAL-MISSION-THREAD. Source: Army Systems Architecture Data Model.	
OPERATIONAL- MISSION- THREAD- ELEMENT	OPERATIONAL- MISSION- THREAD- ELEMENT Horizontal Destination Point Pixel Quantity	OMTHD EL_HDes t_qty	Numb er	int	NULL	No	No	The quantity, expressed in pixels, which is the horizontal finishing point on a Video Display Unit (VDU) screen of a Thread link.	Thread-Link Horizontal-Destination-Point Quantity

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
OPERATIONAL- MISSION- THREAD- ELEMENT	OPERATIONAL- MISSION- THREAD- ELEMENT Horizontal Origination Point Pixel Quantity	OMTHD EL_HOri g_qy	Numb er	int	NULL	No	No	The quantity, expressed in pixels, which is the horizontal starting point on a Video Display Unit (VDU) screen of a Thread link.	Thread-Link Horizontal-Origination-Point Quantity
OPERATIONAL- MISSION- THREAD- ELEMENT	OPERATIONAL- MISSION- THREAD- ELEMENT Identifier	OMTHD EL_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a OPERATIONAL-MISSION-THREAD-IER for a specific OPERATIONAL-MISSION-THREAD and a specific EXCH-NEED-LINE-IER.	C4RDP, Thread-Link Key Quantity--The quantity of the database-generated key that represents a link in a Thread.
OPERATIONAL- MISSION- THREAD- ELEMENT	OPERATIONAL- MISSION- THREAD- ELEMENT Processing Delay Quantity	OMTHD EL_trpd _qy	Numb er	float	NULL	No	No	The time delay in processing by the receiving OPFAC and information system for the INFORMATION-PRODUCT exchanged during the sequence of the thread. Source: Army Systems Architecture Data Model.	Unit is SECONDS.
OPERATIONAL- MISSION- THREAD- ELEMENT	OPERATIONAL- MISSION- THREAD- ELEMENT Record Security Classification Code	OMTHD EL_rsec _cd	Securi- ty- Classi- fication	char(1)	NULL	No	No	The code that denotes the security classification of the metadata describing the Thread-Link.	U = Unclassified, C = Confidential, S = Secret. Source: C4RDP, Thread-Link Security-Classification Code--The code that denotes the security classification of the metadata describing the Thread-Link.
OPERATIONAL- MISSION- THREAD- ELEMENT	OPERATIONAL- MISSION- THREAD- ELEMENT Sequence Number Identifier	OMTHD EL_seq_ nr_id	Id(int)	int	NULL	No	No	The number that identifies the sequence within the thread for the OPFAC-to-OPFAC information exchange (IER). Source: Army Systems Architecture Data Model.	
OPERATIONAL- MISSION- THREAD- ELEMENT	OPERATIONAL- MISSION- THREAD- ELEMENT Vertical Destination Point Pixel Quantity	OMTHD EL_VDes t_qy	Numb er	int	NULL	No	No	The quantity, expressed in pixels, which is the vertical finishing point on a Video Display Unit (VDU) screen of a Thread link.	Thread-Link Vertical-Destination-Point Quantity
OPERATIONAL- MISSION- THREAD- ELEMENT	OPERATIONAL- MISSION- THREAD- ELEMENT Vertical Origination Point Pixel Quantity	OMTHD EL_VOri g_qy	Numb er	int	NULL	No	No	The quantity, expressed in pixels, which is the vertical starting point on a Video Display Unit (VDU) screen of a Thread link.	Thread-Link Vertical-Origination-Point Quantity

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
OPERATIONAL-SCENARIO	OPERATIONAL-SCENARIO	OP_SCE_N_descrx	Text(8000)	varchar(8000)	NULL	No	No	The text that briefly summarizes a specific OPERATIONAL-SCENARIO.	
OPERATIONAL-SCENARIO	OPERATIONAL-SCENARIO	OP_SCE_N_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a specific OPERATIONAL-SCENARIO.	
OPERATIONAL-SCENARIO	OPERATIONAL-SCENARIO	OP_SCE_N_nm	Name	varchar(50)	NULL	No	No	The name of an OPERATIONAL-SCENARIO.	
ORGANIZATION	ORGANIZATION	ORG_adr_tx	String	varchar(2000)	NULL	No	No	THE MAILING ADDRESS OF THE ORGANIZATION	Source: JCAPS 2.1 (ORG_ADDRESS_TEXT).
ORGANIZATION	ORGANIZATION	ORG_adr_min_loss_rt	Numb er	decimal(6,2)	NULL	No	No	(29204) (A) THE ACTUAL RATE OF PERSONNEL ATTRITION APPLICABLE TO AN ORGANIZATION.	Units of PERCENT.
ORGANIZATION	ORGANIZATION	ORG_cat_cd	String	char(1)	NULL	No	No	(23495) (A) THE CODE THAT REPRESENTS A CLASSIFICATION OF AN ORGANIZATION.	A--GOVERNMENT ORGANIZATION; B--PRIVATE SECTOR ORGANIZATION; C--SOVEREIGN BODY. [1-character (max) string]
ORGANIZATION	ORGANIZATION	ORG_cls_cd	String	char(1)	NULL	No	No	(17043) (A) THE CODE THAT REPRESENTS A CATEGORIZATION OF AN ORGANIZATION.	N--NON UNIFORMED SERVICE; U--UNIFORMED SERVICE. [1-character (max) string]
ORGANIZATION	ORGANIZATION	ORG_cur_abbr_nm	Name	varchar(50)	NULL	No	No	A SHORTENED FORM OF THE CURRENT NAME OF AN ORGANIZATION.	Source: JCAPS 2.1 (ORG_CUR_ABRV_NM).
ORGANIZATION	ORGANIZATION	ORG_cur_nm	String	varchar(250)	NULL	No	No	THE NAME OF THE ORGANIZATION AT THE PRESENT TIME.	Source: JCAPS 2.1 (ORG_CUR_NM).
ORGANIZATION	ORGANIZATION	ORG_desc_tx	Text(8000)	varchar(8000)	NULL	No	No	(4882) (A) THE TEXT DESCRIBING AN ORGANIZATION.	
ORGANIZATION	ORGANIZATION	ORG_dur_ty_cd	String	char(1)	NULL	No	No	(23496) (A) THE CODE THAT REPRESENTS A SPECIFIC KIND OF TIME FRAME ASSOCIATED WITH AN ORGANIZATION.	A--PERMANENT ORGANIZATION; B--TEMPORARY ORGANIZATION. [1-character (max) string]
ORGANIZATION	ORGANIZATION	ORG_ent_rprs_ty_cd	Code_smallint	smallint	NULL	No	No	(32511) (A) THE CODE THAT DENOTES THE KIND OF ENTERPRISE UNDERTAKEN BY AN ORGANIZATION.	1--BUSINESS ENTERPRISE. [1-character (max) string]
ORGANIZATION	ORGANIZATION	ORG_fm_d_foe_cd	Code_smallint	smallint	NULL	No	No	(11228) (A) THE CODE THAT DENOTES WHETHER A SPECIFIC ORGANIZATION IS FRIENDLY.	1--FRIEND; 2--FOE; 3--NOT KNOWN; 4--NEUTRAL; 5--NOT SPECIFIED.
ORGANIZATION	ORGANIZATION	ORG_id	Id(int)	int	NOT NULL	Yes	No	(7875/1) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	
ORGANIZATION	ORGANIZATION	ORG_op_elem_ind_cd	Code_smallint	smallint	NULL	No	No	The code that denotes whether an instance of ORGANIZATION is considered to be an operational facility (OPFAC) or other sender or receiver of information.	1--Serves as an operational element; 2--Serves as an operational facility; 3--Not applicable; 8--Not specified; 9--Not known.

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Entity Name	Attribute Name	Col. Name	Do- main	Data- type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
ORGANIZATION	ORGANIZATION PRIMARY ACTIVITY CODE	ORG_pri m_act_c d	String	varchar(2)	NULL	No	No	(12712/3) (A) THE CODE THAT REPRESENTS THE PRINCIPAL FUNCTION OF AN ORGANIZATION.	AA--AVIATION; AB--COMBAT; AC--CONSTRUCTION; AD-- EDUCATION; AE--ENGINEERING; AF--ENTERTAINMENT; AG-- FINANCE; AH--FOOD SERVICE; AI--GOVERNANCE; AJ--HEALTH; AK--INTELLIGENCE; AL--LAW ENFORCEMENT; AM-- MANAGEMENT SUPPORT; AN--MANPOWER; AO--PERSONNEL; AP--PROCUREMENT; AQ--PURSUIT OF SPECIAL INTEREST(S); AR--RACKETEERING; AS--RELIGION; AT--SOCIAL INTERACTION; AU--SPORTS; AV--SUPPLY; AW--TAXATION; AX--TECHNOLOGY SUPPORT; AY--TELECOMMUNICATIONS; AZ--TERRORISM; BA-- TRAINING; BB--TRANSPORTATION. [2-character (max) string]
ORGANIZATION	ORGANIZATION PRIMARY INDUSTRY CATEGORY CODE	ORG_pin dust_cat _cd	String	char(1)	NULL	No	No	(12697/2) (A) THE CODE THAT REPRESENTS A CLASSIFICATION OF THE PRINCIPAL BUSINESS AREA OF AN ORGANIZATION.	A--MANUFACTURING INDUSTRY; B-- SERVICE INDUSTRY. [1-character (max) string]
ORGANIZATION	ORGANIZATION TYPE CODE	ORG_ty_ cd	Code_ small int	smallint	NULL	No	No	(12705) (A) THE CODE THAT REPRESENTS A KIND OF ORGANIZATION.	01--UNITED STATES FEDERAL GOVERNMENT; 02--UNITED STATES STATE GOVERNMENT; 03--UNITED STATES CITY GOVERNMENT; 04--UNITED STATES COUNTY GOVERNMENT; 05- FOREIGN GOVERNMENT; 06--PRIVATE SECTOR. 2-character (max) string]
ORGANIZATION	ORGANIZATION Unit Identification Code (JCAPS)	ORG_Ui C_cd	String	varchar(6)	NULL	No	No	THE UNIT IDENTIFIER CODE OF THE ORGANIZATION	Source: JCAPS 2.1 (UIC_CD).
ORGANIZATION	ORGANIZATION VENDOR INDICATOR CODE	ORG_vn dr_ind_c d	String	char(1)	NULL	No	No	(16302) (A) A CODE THAT INDICATES THAT THE ORGANIZATION IS A VENDOR.	N--NO, THE ORGANIZATION IS NOT A VENDOR; Y--YES, THE ORGANIZATION IS A VENDOR. [1-character (max) string]
ORGANIZATION	ORGANIZATION- ECHELON-TYPE CODE	ORG_EC H_TYPE _cd	String	varchar(2)	NULL	No	Yes	(17044) (A) THE CODE THAT REPRESENTS AN ORGANIZATION- ECHELON-TYPE.	AA--BATTALION; AB--BATTERY; AC--BRANCH; AD--BRIGADE; AE-- COMBAT COMMAND; AF--COMPANY; AG--CONTROL PARTY; AH-- DETACHMENT; AI--DIVISION; AJ--ELEMENT; AK--FIELD; AL-- FLEET; AM--FLIGHT; AN--FORCE; AO--FRONT; AP--GROUP; AQ-- HEADQUARTERS; AR--PATROL; AS--PLATOON; AT--REGIMENT; AU--SECTION; AV--SQUAD; AW--SQUADRON; AX--TASK ELEMENT; AY--TASK FORCE; AZ--TASK GROUP; BA--TASK UNIT; BB--TEAM; BC--TROOP; BD--WING. (DDDS, approved)
ORGANIZATION	ORGANIZATION- TYPE IDENTIFIER	ORGT_id	Id(int)	int	NULL	No	Yes	(11184) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC ORGANIZATION-TYPE.	
ORGANIZATION- ASSOCIATION	ARCHITECTURE Identifier	ARCH_id	Id(int)	int	NULL	No	Yes	The identifier of a specific ARCHITECTURE.	
ORGANIZATION- ASSOCIATION	Ordinate ORGANIZATION Identifier	Ord_OR G_id	Id(int)	int	NOT NULL	Yes	Yes	(7875/1) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	
ORGANIZATION- ASSOCIATION	ORGANIZATION- ASSOCIATION Description Text (JCAPS)	ORGA_d escr_tx	String	varchar(2 000)	NULL	No	No	THE TEXT WHICH DESCRIBES THE RELATIONSHIP BETWEEN THE ORGANIZATIONS	Source: JCAPS 2.1 (REL_ASN_DSC_TX).
ORGANIZATION- ASSOCIATION	ORGANIZATION- ASSOCIATION Effective Date	ORGA_e ff_dt	Date	datetime	NULL	No	No	The beginning of the period of validity of a specific ORGANIZATION- ASSOCIATION.	

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Annex M (Proposed Attribute Specifications)

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Proposed JCAPS View of the CADM

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Entity Name	Attribute Name	Col. Name	Do- main	Data- type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
ORGANIZATION- ASSOCIATION	ORGANIZATION- ASSOCIATION Identifier	ORGA_id	Id(int)	int	NOT NULL	Yes	No	(11341/1) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC ORGANIZATION-ASSOCIATION.	
ORGANIZATION- ASSOCIATION	ORGANIZATION- ASSOCIATION Reason Code	ORGA_r sn_cd	Code_ smalli nt	smallint	NULL	No	No	The code that specifies the relationship between the subordinate ORGANIZATION and the ordinate ORGANIZATION. See DDDS (12704) (A) ORGANIZATION-ASSOCIATION-REASON Code. 1--Reports to; 2--Controls; 3--Is part of; 4--Does accounting for; 5--Replaces; 6--Other; 98--Not Specified; 99--Not known. Additions from GH3 are: 7--Has full command of; 8--Has operational command of; 9--Has tactical control of; 10--Has tactical command of; 11--Has tactical control of; 12--Is alternate for; 13--Is at priority call to; 14--Is attached to; 15--Is captor of; 16--Is in direct support of; 17--Is in general support of; 18--Is in general support reinforcing of; 19--Is in reserve to; 20--Is on call to; 21--Is released from its relationship with; 22--Is the same as; 23--Is under command for administration; 24--Is under command for movement; 25--Provides logistic services to; 26--Reinforces.	
ORGANIZATION- ASSOCIATION	ORGANIZATION- ASSOCIATION Termination Date	ORGA_t erm_dt	Date	datetime	NULL	No	No	The end of the period of validity of a specific ORGANIZATION-ASSOCIATION.	
ORGANIZATION- ASSOCIATION	Subordinate ORGANIZATION Identifier	Sub_OR G_id	Id(int)	int	NOT NULL	Yes	Yes	(7875/1) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	
ORGANIZATION- LOCATION- POINT	ORGANIZATION IDENTIFIER	ORG_id	Id(int)	int	NOT NULL	Yes	Yes	(7875/1) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	
ORGANIZATION- LOCATION- POINT	ORGANIZATION- LOCATION ASSOCIATION CODE	ORLOC_ ass_cd	Code_ smalli nt	smallint	NULL	No	No	(11900/2) (A) THE CODE THAT DENOTES THE TYPE OF RELATION BETWEEN A SPECIFIC LOCATION AND A SPECIFIC ORGANIZATION THAT IS EFFECTIVE DURING A SPECIFIC TIME. 01--CURRENT (INCLUDES OBSERVED AND DETECTED); 02--PLANNED; 03--REQUESTED; 04--REQUIRED; 05--REPORTED; 06--PROPOSED. (DDDS, June 1998) [2-character (max) string]	
ORGANIZATION- LOCATION- POINT	ORGANIZATION- LOCATION DURATION QUANTITY	ORLOC_ dur_qy	Numb er	int	NULL	No	No	(11911) (A) THE QUANTITY OF TIME FOR WHICH A SPECIFIC ASSOCIATION OF A SPECIFIC LOCATION TO A SPECIFIC ORGANIZATION IS DETERMINED TO BE EFFECTIVE.	
ORGANIZATION- LOCATION- POINT	ORGANIZATION- LOCATION EFFECTIVE CALENDAR DATE-TIME	ORLOC_ eff_caldt m	Date/ti me	datetime	NULL	No	No	(18793) (A) THE TIME OF THE BEGINNING OF EFFECTIVENESS OF AN ORGANIZATION-LOCATION.	
ORGANIZATION- LOCATION- POINT	ORGANIZATION- LOCATION IDENTIFIER	ORLOC_ id	Id(int)	int	NOT NULL	Yes	No	(11913) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC ORGANIZATION-LOCATION.	
ORGANIZATION- LOCATION- POINT	ORGANIZATION- LOCATION REASON TEXT	ORLOC_ rsn_tx	String	varchar(8 000)	NULL	No	No	(16221) (A) THE TEXT THAT DESCRIBES THE PURPOSE OF A SPECIFIC ORGANIZATION-LOCATION.	
ORGANIZATION- LOCATION- POINT	ORGANIZATION- LOCATION SEQUENCE IDENTIFIER	ORLOC_ seq_id	Id(int)	int	NULL	No	No	(11914) (A) THE IDENTIFIER THAT REPRESENTS THE RELATIVE POSITION OF AN ORGANIZATION-LOCATION AMONG THE SET OF ORGANIZATION-LOCATIONS ASSOCIATED WITH A SPECIFIC ORGANIZATION.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note	
ORGANIZATION-LOCATION-POINT	Point LOCATION Identifier	LOC_id	Id(int)	int	NOT NULL	Yes	Yes	(11893) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC LOCATION.		
ORGANIZATION-POINT TYPE	COUNTRY CODE	CNTRY_cd	String	char(2)	NULL	No	Yes	(14392) (A) THE CODE THAT REPRESENTS A COUNTRY.	AA = ARUBA (ATCCIS uses domain value "AB"); AC = ANTIGUA AND BARBUDA; AE = UNITED ARAB EMIRATES (ATCCIS uses domain value "TC"); AF = AFGHANISTAN; AG = ALGERIA; AJ = AZERBAIJAN (ATCCIS uses domain value "AZ"); AL = ALBANIA; AM = ARMENIA; AN = ANDORRA; AO = ANGOLA; AQ = AMERICAN SAMOA; AR = ARGENTINA; AS = AUSTRALIA; AT = ASHMORE AND CARTIER ISLANDS; AU = AUSTRIA; AV = ANGUILLA; AY = ANTARCTICA; BA = BAHRAIN; BB = BARBADOS; BC = BOTSWANA; BD = BERMUDA; BE = BELGIUM; BF = BAHAMAS, THE (In ATCCIS, "Bahamas"); BG = BANGLADESH; BH = BELIZE; BI = Blue (from ATCCIS); BJ = Bradyland (from ATCCIS); BK = BOSNIA AND HERZEGOVINA (In ATCCIS, "BK" represents "Beylarus", "BZ" represents "Bosnia" and "HZ" represents "Herzegovina"); BL = BOLIVIA; BM = BURMA; BN = BENIN; BO = BELARUS (ATCCIS uses domain value "BK"); BP = SOLOMON ISLANDS; BQ = NAVASSA ISLAND; BR = BRAZIL; BS = BASSAS DA INDIA; BT = BHUTAN; BU = BULGARIA; BV = BOUVET ISLAND; BX = BRUNEI; BY = BURUNDI; CA = CANADA; CB = CAMBODIA; CD = CHAD; CE = SRI LANKA; CF = CONGO; CG = CONGO (DEMOCRATIC REPUBLIC OF THE) (In ATCCIS, "Zaire"); CH = CHINA; CI = CHILE; CJ = CAYMAN ISLANDS; CK = COCOS (KEELING) ISLANDS; CM = CAMEROON; CN = COMOROS; CO = COLOMBIA; CQ = NORTHERN MARIANA ISLANDS; CR = CORAL SEA ISLANDS; CS = COSTA RICA; CT = CENTRAL AFRICAN REPUBLIC; CU = CUBA; CV = CAPE VERDE; CW = COOK ISLANDS; CY = CYPRUS; DA = DENMARK; DJ = DJIBOUTI; DO = DOMINICA; DQ = JARVIS ISLAND; DR = DOMINICAN REPUBLIC; EA = Eatwatj (from ATCCIS); EC = ECUADOR; EG = EGYPT; EI = IRELAND; EK = EQUATORIAL GUINEA; EN = ESTONIA; ER = ERITREA (Not found in ATCCIS); ES = EL SALVADOR; ET = ETHIOPIA; EU = EUROPA ISLAND; EZ = CZECH REPUBLIC (ATCCIS uses domain value "CP"); FG = FRENCH GUIANA; FI = FINLAND; FJ = FIJI; FK = FALKLAND ISLANDS (ISLAS MALVINAS) (ATCCIS uses domain value "FA"); FM = FEDERATED STATES OF MICRONESIA; FO = FAROE ISLANDS; FP = FRENCH POLYNESIA; FQ = BAKER ISLAND; FR = FRANCE; FS = FRENCH SOUTHERN AND ANTARCTIC LANDS; GA = GAMBIA, THE (In ATCCIS, "Gambia"); GB = GABON; GD = Gold (from ATCCIS); GG = GEORGIA; GH = GHANA; GI = GIBRALTAR; GJ = GRENADA; GK = GUERNSEY; GL = GREENLAND; GM = GERMANY (ATCCIS uses domain value "CP"); GO = GLORIOSO ISLANDS; GP = GUADELOUPE; GQ = GUAM; GR = GREECE; GT = GUATEMALA (In ATCCIS, "Guatemala"); GV = GUINEA; GX = Genericland (from ATCCIS); GY = GUYANA; GZ = GAZA STRIP; HA = HAITI; HK = HONG KONG; HM = HEARD ISLAND AND MCDONALD ISLANDS; HO = HONDURAS; HQ = HOWLAND ISLAND; HR = CROATIA (ATCCIS uses domain value "CX" for "Croatia (Hrvatska)"); HU = HUNGARY; IC = ICELAND; ID = INDONESIA; IM = MAN, ISLE OF (In ATCCIS, "Man"); IN = INDIA; IO = BRITISH INDIAN OCEAN TERRITORY; IP = CLIPPERTON ISLAND; IR = IRAN; IS = ISRAEL; IT = ITALY; IV = COTE D'IVOIRE (In ATCCIS, "Ivory Coast"); IY = Iraq;	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
								<p>Saudi Arabia Neutral Zone (from ATCCIS); IZ = IRAQ; JA = JAPAN; JE = JERSEY; JM = JAMAICA; JN = JAN MAYEN; JO = JORDAN; JQ = JOHNSTON ATOLL; JU = JUAN DE NOVA ISLAND; KE = KENYA; KG = KYRGYZSTAN (ATCCIS uses domain value "KY"); KN = KOREA; DEMOCRATIC PEOPLE'S REPUBLIC OF (In ATCCIS, "Korea"); KO = KINGMAN REEF; KR = KIRIBATI; KS = KOREA, REPUBLIC OF (In ATCCIS, "Korea"); KT = CHRISTMAS ISLAND; KU = KUWAIT; KZ = KAZAKHSTAN; LA = LAOS; LE = LEBANON; LG = LATVIA (ATCCIS uses domain value "LV"); LH = LITHUANIA; LI = LIBERIA; LO = SLOVAKIA (Not in ATCCIS); LO = PALMYRA ATOLL; LS = LIECHTENSTEIN; LT = LESOTHO; LU = LUXEMBOURG; LY = LIBYA; MA = MADAGASCAR; MB = MARTINIQUE (In ATCCIS, "Martinus"); MC = MACAU; MD = MOLDOVA (In ATCCIS, "Moldavia"); MF = MAYOTTE; MG = MONGOLIA; MH = MONTserrat; MI = MALAWI; MK = MACEDONIA (ATCCIS uses domain value "ME"); ML = MALI; MM = Multinational (from ATCCIS); MN = MONACO; MO = MOROCCO; MP = MAURITIUS; MQ = MIDWAY ISLANDS; MR = MAURITANIA; MT = MALTA; MU = OMAN; MV = MALDIVES; MW = MONTENEGRO (Not in ATCCIS); MX = MEXICO; MY = MALAYSIA; MZ = MOZAMBIQUE; NC = NEW CALEDONIA; NE = NIUE; NF = NORFOLK ISLAND; NG = NIGER; NH = VANUATU; NI = NIGERIA; NL = NETHERLANDS; NO = NORWAY; : = NP = NEPAL; NQ = Trust Territory of the Pacific Islands (from ATCCIS); NR = NAURU; NS = SURINAME; NT = NETHERLANDS ANTILLES (ATCCIS uses domain value "NA"; "NT" in ATCCIS is "NATO"); NU = NICARAGUA; NZ = NEW ZEALAND; OR = Orange (from ATCCIS); PA = PARAGUAY; PC = PITCAIRN ISLANDS; PE = PERU; PF = PARACEL ISLANDS; PG = SPRATLY ISLANDS; PK = PAKISTAN; PL = POLAND; PM = PANAMA; PO = PORTUGAL; PP = PAPUA NEW GUINEA; PS = PALAU; PU = GUINEA-BISSAU; QA = QATAR; RE = REUNION; RM = MARSHALL ISLANDS (Not in ATCCIS); RO = ROMANIA; RP = PHILIPPINES; RQ = PUERTO RICO; RS = RUSSIA; RW = RWANDA; SA = SAUDI ARABIA; SB = ST. PIERRE AND MIQUELON; SC = ST. KITTS AND NEVIS (In ATCCIS, "St. Christopher and Nevis"); SE = SEYCHELLES; SF = SOUTH AFRICA; SG = SENEGAL; SH = ST. HELENA; SI = SLOVENIA; SJ = SIERRA LEONE; SM = SAN MARINO; SN = SINGAPORE; SO = SOMALIA; SP = SPAIN; SR = SERBIA (In ATCCIS, "Slovak Republic"); ST = ST. LUCIA; SU = SUDAN; SV = SVALBARD; SW = SWEDEN; SX = SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS (Not in ATCCIS); SY = SYRIA; SZ = SWITZERLAND; TD = TRINIDAD AND TOBAGO; TE = TROMELIN ISLAND; TH = THAILAND; TI = TAJIKISTAN; TK = TURKS AND CAICOS ISLANDS; TL = TOKELAU; TN = TONGA; TO = TOGO; TP = SAO TOME AND PRINCEPE; TS = TUNISIA; TU = TURKEY; TV = TUVALU; TW = TAIWAN; TX = TURKMENISTAN; TZ = TANZANIA; UG = UGANDA; UK = UNITED KINGDOM; UP = UKRAINE (ATCCIS uses domain value "UA"); US = UNITED STATES; UV = BURKINA; UY = URUGUAY; UZ = UZBEKISTAN; VC = ST. VINCENT AND THE GRENADINES; VE = VENEZUELA; VI = BRITISH VIRGIN ISLANDS; VM = VIETNAM; VQ = VIRGIN ISLANDS; VT = VATICAN CITY; WA = NAMIBIA; WE = WEST BANK; WF = WALLIS AND FUTUNA; WI = WESTERN SAHARA; WQ = WAKE ISLAND; WS = SAMOA (In ATCCIS, "Western Samoa"); WZ = SWAZILAND; YM = YEMEN (In ATCCIS, "YS" represents "Yemen</p>	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
								(Aden)" and "YE" represents "Yemen (Sanaa)"; ZA = ZAMBIA; ZI = ZIMBABWE. Sources: DDDS (May 2000) and ATCCIS Generic Hub 4 (LC2IEDM).	
ORGANIZATION-TYPE	ICON-CATALOG Identifier	ICONCA T_id	Id(int)	int	NULL	No	Yes	The identifier of a specific instance of ICON-CATALOG.	
ORGANIZATION-TYPE	ORGANIZATION-TYPE Abbreviated Name	ORGT_a bbrev_nm	String	varchar(20)	NULL	No	No	The shorted name for a specific ORGANIZATION-TYPE.	
ORGANIZATION-TYPE	ORGANIZATION-TYPE ARM CODE	ORGT_arm_cd	Code_smallint	smallint	NULL	No	No	(11229) (A) THE CODE THAT DENOTES THE FUNCTIONAL DIVISION TO WHICH AN ORGANIZATION-TYPE BELONGS. 01--INFANTRY; 02--ARMORED; 03--ENGINEER; 04--ARTILLERY (NOT OTHERWISE SPECIFIED); 05--PROVOST; 06--INTELLIGENCE; 07--TRANSPORT; 08--SUPPLY; 09--CHEMICAL; 10--MEDICAL; 12--SIGNAL; 13--AIR DEFENSE; 14--ORDNANCE; 15--ELECTRONIC WARFARE (EW); 16--PIONEER; 17--RECONNAISSANCE; 18--CAVALRY; 19--AVIATION (GROUND ATTACK); 20--AVIATION (TRANSPORT); 21--ANTI-TANK; 22--ATTACK HELICOPTER; 23--HEADQUARTERS; 24--LABOR RESOURCES; 25--MAINTENANCE; 26--METEOROLOGICAL; 27--MILITARY CIVILIAN AFFAIRS; 28--MILITARY POLICE; 29--MORTAR; 30--MULTI-ROLE; 31--NUCLEAR, CHEMICAL, AND BIOLOGICAL; 32--PAY/FINANCE; 33--POSTAL AND COURIER; 34--PSYCHOLOGICAL; 35--QUARTERMASTER/LOGISTICS; 36--REINFORCEMENT/REPLACEMENT; 37--ROCKET ARTILLERY; 38--SOUND RANGING; 39--SPECIAL FORCE; 40--SURVEY; 41--VETERINARY; 98--NOT FURTHER SPECIFIED; 99--NOT KNOWN. [2-character (max) string]	
ORGANIZATION-TYPE	ORGANIZATION-TYPE ARM QUALIFIER CODE	ORGT_arm_qual_cd	Code_smallint	smallint	NULL	No	No	(11232) (A) THE CODE THAT DENOTES A SUBGROUP OF A CLASS TO WHICH AN ORGANIZATION-TYPE BELONGS THAT IS DEFINED AS A FUNCTIONAL DIVISION OR GROUPING OF AN ARMED SERVICE. 01--MECHANIZED; 02--ARMORED; 03--WHEELED; 04--MOTORIZED; 05--AIRBORNE; 06--AIRMObILE; 07--PARACHUTE; 08--LIGHT; 09--MEDIUM; 10--HEAVY; 11--AMPHIBIOUS; 12--FIELD; 13--TRACKED; 15--BRIDGE LAYING; 16--CONSTRUCTION; 17--EXPLOSIVE ORDNANCE DISPOSAL; 18--MINEFIELD; 19--ROAD/RAILWAY SUPPORT; 20--MOUNTAIN; 21--OVERSNOW; 22--RAIL MOBILE; 23--WHEELED/TRACKED COMBINATION; 98--NOT FURTHER SPECIFIED; 99--NOT KNOWN. [2-character (max) string]	
ORGANIZATION-TYPE	ORGANIZATION-TYPE ECHELON CODE	ORGT_ech_cd	Code_smallint	smallint	NULL	No	No	(11231) (A) THE CODE THAT DENOTES A CLASS TO WHICH A UNIT BELONGS THAT IS DEFINED AS THE LOWEST STRUCTURAL LEVEL OR POINT AT WHICH ORGANIZATIONAL CONTROL OR AUTHORITY OF A SPECIFIC ORGANIZATION-TYPE IS CONCENTRATED. 01--SQUAD/FIRE TEAM; 02--SECTION; 03--TROOP/PLATOON; 04--COMPANY/SQUADRON/BATTERY; 05--BATTALION; 06--REGIMENT; 07--BRIGADE; 08--DIVISION; 09--CORPS; 10--FIELD ARMY; 11--ARMY GROUP; 12--FRONT; 13--GROUP; 14--BATTLE GROUP; 15--TASK FORCE; 16--FIELD FORCE; 17--THEATRE ARMY; 98--NOT FURTHER SPECIFIED; 99--NOT KNOWN. [2-character (max) string] Changes based on ATCCIS Generic Hub (Unit Type Size Code): 01 = SQUAD; 18 = Team/Fire Team/Crew; 19 = Battalion Group; 20 = Company Group; 21 = Flight.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note	
ORGANIZATION-TYPE	ORGANIZATION-TYPE FUNCTION CODE	ORGT_func_cd	Code_smallint	smallint	NULL	No	No	(11234) (A) THE CODE THAT DENOTES THE ROLE PERFORMED BY A UNIT.	01--HEADQUARTERS; 02--HEADQUARTERS (MAIN); 03--HEADQUARTERS (TACTICAL); 04--HEADQUARTERS (FORWARD); 05--HEADQUARTERS (REAR); 06--HEADQUARTERS (STEPUP); 07--HEADQUARTERS (ALTERNATE); 08--SCREEN; 09--FLANK GUARD; 10--REAR GUARD; 11--COVERING FORCE; 12--OBSERVATION POST; 13--FORWARD ELEMENT; 14--MAIN BODY; 15--REAR PARTY; 16--VANGUARD; 17--RENDEZVOUS POINT; 18--CHECK POINT; 19--UNIT; 20--FIRE SUPPORT ELEMENT; 21--FIRE SUPPORT ELEMENT MAIN; 22--FIRE SUPPORT ELEMENT (TACTICAL); 23--FIRE SUPPORT ELEMENT REAR; 24--FIRE SUPPORT COORDINATION CENTER; 25--FIRE SUPPORT CENTER B; 26--FIRE DIRECTION CENTER; 27--FIRE DIRECTION CENTER A; 28--FIRE DIRECTION CENTER B; 29--HEADQUARTERS SERVICE SUPPORT; 30--SERVICE SUPPORT UNIT; 31--REAR AREA OPERATIONS CENTER; 32--FORWARD OBSERVER; 33--FIRE SUPPORT TEAM; 34--SHORE PARTY; 35--OBSERVER; 36--AIR CONTROL PARTY; 37--RADAR; 38--METEOROLOGICAL STATION; 39--COMBAT OPERATIONS CENTER; 40--AMMUNITION TRANSFER POINT; 41--TRAINS; 42--SUPPLY POINT; 43--TACTICAL OPERATIONS CENTER; 44--SUPPORTING ARMS SPECIAL STAFF; 45--SUPPORTING ARMS COORDINATION CENTER; 46--FLIGHT; 98--NOT FURTHER SPECIFIED; 99--NOT KNOWN. [2-character (max) string]	
ORGANIZATION-TYPE	ORGANIZATION-TYPE IDENTIFIER	ORGT_id	Id(int)	int	NOT NULL	Yes	No	(11184) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC ORGANIZATION-TYPE.		
ORGANIZATION-TYPE	ORGANIZATION-TYPE Name	ORGT_nm	String	varchar(250)	NULL	No	No	(33182/1) (D) THE NAME OF AN ORGANIZATION TYPE.		
ORGANIZATION-TYPE	ORGANIZATION-TYPE Role Category Code	ORGT_role_cat_cd	Code_smallint	smallint	NULL	No	No	The code that denotes a specific class of behavior assigned to an ORGANIZATION-TYPE.	1--Operational facility; 2--Operational Element; 3--Command Post; 4--Command Post Cell; 5--Communication Facility; 6--Unit Type; 8--Not specified; 9--Not known.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
ORGANIZATION-TYPE	ORGANIZATION-TYPE SERVICE CODE	ORGT_s vc_cd	Code small int	smallint	NULL	No	No	(11230/1) (A) THE CODE THAT REPRESENTS A GROUP CAPABLE OF FUNCTIONING AS A COMBAT, COMBAT SUPPORT OR COMBAT SERVICE ORGANIZATION TO WHICH A UNIT BELONGS. (11230/2) (D) THE CODE THAT REPRESENTS A GROUP CAPABLE OF FUNCTIONING AS A COMBAT, COMBAT SUPPORT OR COMBAT SERVICE ORGANIZATION TO WHICH A UNIT BELONGS.	01--ARMY; 02--NAVY; 03--AIR FORCE; 04--MARINES; 05--CIVILIAN/GOVERNMENT; 06--CIVILIAN/NON-GOVERNMENT; 07--ARMED FORCES; 08--NATIONAL GUARD; 98--NOT FURTHER SPECIFIED; 99--NOT KNOWN (DDDS, Approved). The following values are being proposed (11230/2, developmental): 09--OTHER DOD and 96--OTHER. CADM 2.0 proposes the following additional values: 21--Army Reserve; 22--Army National Guard; 23--Navy Reserve; 24--Marine Corps Reserve; 25--Air Force Reserve; 26--Air National Guard; 27--Coast Guard; 28--Coast Guard Reserve; 29--Civilian DoD; 30: Civilian Non-DoD/Government; 80--Multinational (added for CADM 2.0). CADM 2.0 recommends the following values be deleted when and if the recommended values are adopted: 05 (Civilian/Government) and 08 (National Guard). The new values permit the identification of reserve types of units, distinguishing between Army National Guard and Air National Guard types of units, and distinguishing the class of DoD Civilian units. Support for CJCSI 6212.01B (Ref 2, 20 Oct 99) requires the following changes: 10 = Joint, 11 = Allies; 12 = DoD Agency; 13 = Department of State; 14 = Other Federal Government; 15 = Non-Government Organization (NGO)/Private Volunteer Organization (PVO); 16 = Other Civilian (omitting values 05, 06, 07, 29, and 30, and change the name for 80 to "Multinational other than Allies." For the CJCSI 6212.01B IER Matrix, the following Service codes would be permitted: 10 (Joint), 01 (Army), 02 (Navy), 04 (Marines); 03 (Air Force); 27 (Coast Guard); 11 (Allies); 12 (DoD Agency); 13 (Department of State); 14 (Other Federal Government); 15 (NGO/PVO); and 16 = (Other Civilian).
ORGANIZATION-TYPE-ASSOCIATION (ASA)	ARCHITECTURE Identifier	ARCH_id	Id(int)	int	NULL	No	Yes	The identifier of a specific ARCHITECTURE.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
ORGANIZATION-TYPE-ASSOCIATION {ASA}	EXCHANGE-RELATIONSHIP-TYPE Code	EXRELT_cd	String	char(2)	NULL	No	Yes	The code that identifies a specific EXCHANGE-RELATIONSHIP-TYPE.	NM = Adjacent Allied DIV/CORPS unit to DIV/CORPS unit; LM = Adjacent US DIV/CORPS unit to DIV/CORPS unit; G0 = Area Support to Supported; RR = CO to CO (different BDE - same DIV); LL = CO to CO (different BN - same BDE); AA = CO to CO (different Company - same BN); UU = CO to CO (different DIV - same CORPS); MP = Corps to Theater (EAC); PL = Corps unit to Host Nation unit; CO = Direct Support to Supported (ADA, ARTY & ENG spt); MN = DIV/CORPS unit to Adjacent Allied DIV/CORPS unit; ML = DIV/CORPS unit to Adjacent DIV/CORPS unit; GM = General Support to Mutual Supported; D0 = General Support to Supported (ADA, ARTY & ENG spt); F0 = GSR unit to Reinforced unit; OA = Higher to Lower in Chain of Command; KJ = Host Nation (Civil) to Theater (Army); LP = Host Nation unit to CORPS unit; 00 = INTRA (within the same unit); A0 = Lower to Higher in Chain of Command; MG = Mutual Support Unit receiving General Support; TB = NATO Military to U.S. Army Unit; NP = Other U.S. Service unit to U.S. Army unit; OF = Reinforced unit to GSR unit; OG = Supported to Area Support; OC = Supported to Direct Support (ADA, ARTY & ENG Spt); OD = Supported to General Support (ADA, ARTY & ENG Spt); JK = Theater (Army) Unit to Host Nation (Civil); TT = Theater to Theater (Includes CONUS); PM = Theater(EAC) to Corps; BT = U.S. Army Unit to NATO Military; PN = U.S. Army unit to other U.S. Service unit; ZZ = UNDEFINED (Used for notional IERs only). Added: 98 = Not Specified; 99 = Not Known. Source: C4RDP, Unit-Relationship Code--The code that represents the relationship between the originator and receiver units.
ORGANIZATION-TYPE-ASSOCIATION {ASA}	Ordinate ORGANIZATION-TYPE Identifier	Ord_ORGT_id	Id(int)	int	NOT NULL	Yes	Yes	(11184) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC ORGANIZATION-TYPE.	
ORGANIZATION-TYPE-ASSOCIATION {ASA}	ORGANIZATION-TYPE-ASSOCIATION Identifier	ORGTA_id	Id(int)	int	NOT NULL	Yes	No	The identifier of an ORGANIZATION-TYPE-ASSOCIATION for a specific Ordinate ORGANIZATION-TYPE and a specific Subordinate ORGANIZATION-TYPE.	
ORGANIZATION-TYPE-ASSOCIATION {ASA}	ORGANIZATION-TYPE-ASSOCIATION Type Code	ORGTA_ty_cd	Code_smallint	smallint	NULL	No	No	The code that denotes a class of ORGANIZATION-TYPE-ASSOCIATION.	1--Is a command post cell of; 2--Is an operational facility for; 3--Is a component of; 4--Is essentially the same as; 5--Replaces; 6--Is usually collocated with; 7--Supports; 8--Not specified; 9--Not known.
ORGANIZATION-TYPE-ASSOCIATION {ASA}	Subordinate ORGANIZATION-TYPE Identifier	Sub_ORGT_id	Id(int)	int	NOT NULL	Yes	Yes	(11184) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC ORGANIZATION-TYPE.	
PERIOD	PERIOD BEGIN DATE	PERIOD_bgn_dt	Date	datetime	NULL	No	No	(12442) (A) THE DATE A PERIOD STARTS.	
PERIOD	PERIOD END DATE	PERIOD_end_dt	Date	datetime	NULL	No	No	(12443) (A) THE LAST DATE OF A PERIOD.	
PERIOD	PERIOD IDENTIFIER	PERIOD_id	Id(int)	int	NOT NULL	Yes	No	(12180) (A) THE IDENTIFIER THAT REPRESENTS A PERIOD.	
PERIOD	PERIOD NAME	PERIOD_nm	String	varchar(250)	NULL	No	No	(12181) (A) THE NAME OF A PERIOD. (12181/2) (C) THE NAME OF A PERIOD.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
PERIOD	PERIOD TYPE NAME	PERIOD_ty_nm	String	varchar(250)	NULL	No	No	(12183/2) (A) THE NAME OF A KIND OF PERIOD.	
POINT	LOCATION IDENTIFIER	LOC_id	Id(int)	int	NOT NULL	Yes	Yes	(11893) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC LOCATION.	
POINT	POINT ELEVATION TYPE CODE	PT_elev_ty_cd	Code_smallint	smallint	NULL	No	No	(16256) (A) THE CODE THAT REPRESENTS THE WAY IN WHICH ELEVATION IS SPECIFIED FOR A POINT. 1 = MEASURED-ELEVATION-POINT; 2 = SEA-SURFACE-POINT; 3 = SEA-FLOOR-POINT; 4 = LAND-SURFACE-POINT; 5 = UNSPECIFIED-ELEVATION-POINT (integer codes used for the CADM). Note: A-MEASURED-ELEVATION-POINT; B-SEA-SURFACE-POINT; C-SEA-FLOOR-POINT; D-LAND-SURFACE-POINT; E-UNSPECIFIED-ELEVATION-POINT. (DDDS, June 1998)	
POINT	POINT HORIZONTAL PRECISION QUANTITY	PT_horiz_prec_qy	Numb_er, Real	real	NULL	No	No	(11920) (A) A QUANTITY OF CIRCULAR ERROR BOUNDS AT THE 90% CONFIDENCE LEVEL FOR THE GIVEN SET OF COORDINATES OF A SPECIFIC POINT.	Units of METERS.
POINT	POINT LATITUDE COORDINATE	PT_lat_coord	Numb_er, Real	float	NULL	No	No	(12591) (A) THE COORDINATE IDENTIFYING THE POSITION OF A POINT RELATIVE TO THE EQUATOR IN THE WORLD GEODETIC SYSTEM 1984 (WGS 84) FRAME OF REFERENCE.	Units of DECIMAL-DEGREES in the range - 90. to 90.
POINT	POINT LONGITUDE COORDINATE	PT_lon_coord	Numb_er, Real	float	NULL	No	No	(12590) (A) THE COORDINATE IDENTIFYING THE POSITION OF A GEOSPATIAL POINT RELATIVE TO THE ZERO MERIDIAN IN THE WORLD GEODETIC SYSTEM 1984 (WGS 84) FRAME OF REFERENCE.	Units of DECIMAL-DEGREES in the range - 180to 180.
POINT-OF-CONTACT	COUNTRY CODE	CNTRY_cd	String	char(2)	NULL	No	Yes	(14392) (A) THE CODE THAT REPRESENTS A COUNTRY. AA = ARUBA (ATCCIS uses domain value "AB"); AC = ANTIGUA AND BARBUDA; AE = UNITED ARAB EMIRATES (ATCCIS uses domain value "TC"); AF = AFGHANISTAN; AG = ALGERIA; AJ = AZERBAIJAN (ATCCIS uses domain value "AZ"); AL = ALBANIA; AM = ARMENIA; AN = ANDORRA; AO = ANGOLA; AQ = AMERICAN SAMOA; AR = ARGENTINA; AS = AUSTRALIA; AT = ASHMORE AND CARTIER ISLANDS; AU = AUSTRIA; AV = ANGULLA; AY = ANTARCTICA; BA = BAHRAIN; BB = BARBADOS; BC = BOTSWANA; BD = BERMUDA; BE = BELGIUM; BF = BAHAMAS, THE (in ATCCIS, "Bahamas"); BG = BANGLADESH; BH = BELIZE; BI = Blue (from ATCCIS); BJ = Bradiyand (from ATCCIS); BK = BOSNIA AND HERZEGOVINA (in ATCCIS, "Bk" represents "Beylarus", "Bz" represents "Bosnia" and "Hz" represents "Herzegovina"); BL = BOLIVIA; BM = BURMA; BN = BENIN; BO = BELARUS (ATCCIS uses domain value "BK"); BP = SOLOMON ISLANDS; BQ = NAVASSA ISLAND; BR = BRAZIL; BS = BASSAS DA INDIA; BT = BHUTAN; BU = BULGARIA; BV = BOUVET ISLAND; BX = BRUNEI; BY = BURUNDI; CA = CANADA; CB = CAMBODIA; CD = CHAD; CE = SRI LANKA; CF = CONGO; CG = CONGO (DEMOCRATIC REPUBLIC OF THE) (in ATCCIS, "Zaire"); CH = CHINA; CI = CHILE; CJ = CAYMAN ISLANDS; CK = COCOS (KEELING) ISLANDS; CM = CAMEROON; CN = COMOROS; CO = COLOMBIA; CQ = NORTHERN MARIANA ISLANDS; CR = CORAL SEA ISLANDS; CS = COSTA RICA; CT = CENTRAL AFRICAN REPUBLIC; CU = CUBA; CV = CAPE VERDE; CW = COOK ISLANDS; CY = CYPRUS; DA = DENMARK; DJ = DJIBOUTI; DO = DOMINICA; DQ = JARVIS ISLAND; DR = DOMINICAN REPUBLIC; EA = Eatwatj (from ATCCIS); EC =	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
								<p>ECUADOR; EG = EGYPT; EI = IRELAND; EK = EQUATORIAL GUINEA; EN = ESTONIA; ER = ERITREA (Not found in ATCCIS); ES = EL SALVADOR; ET = ETHIOPIA; EU = EUROPA ISLAND; EZ = CZECH REPUBLIC (ATCCIS uses domain value "CP"); FG = FRENCH GUIANA; FI = FINLAND; FJ = FIJI; FK = FALKLAND ISLANDS (ISLAS MALVINAS) (ATCCIS uses domain value "FA"); FM = FEDERATED STATES OF MICRONESIA; FO = FAROE ISLANDS; FP = FRENCH POLYNESIA; FQ = BAKER ISLAND; FR = FRANCE; FS = FRENCH SOUTHERN AND ANTARCTIC LANDS; GA = GAMBIA, THE (in ATCCIS, "Gambia"); GB = GABON; GD = Gold (from ATCCIS); GG = GEORGIA; GH = GHANA; GI = GIBRALTAR; GJ = GRENADA; GK = GUERNSEY; GL = GREENLAND; GM = GERMANY (ATCCIS uses domain value "CP"); GO = GLOHOSO ISLANDS; GP = GUADELOUPE; GQ = GUAM; GR = GREECE; GT = GUATEMALA (in ATCCIS, "Guatemala"); GV = GUINEA; GX = Genericland (from ATCCIS); GY = GUYANA; GZ = GAZA STRIP; HA = HATTI; HK = HONG KONG; HM = HEARD ISLAND AND McDONALD ISLANDS; HO = HONDURAS; HQ = HOWLAND ISLAND; HR = CROATIA (ATCCIS uses domain value "CX" for "Croatia (Hrvatska)"); HU = HUNGARY; IC = ICELAND; ID = INDONESIA; IM = MAN, ISLE OF (in ATCCIS, "Man"); IN = INDIA; IO = BRITISH INDIAN OCEAN TERRITORY; IP = CLIPPERTON ISLAND; IR = IRAN; IS = ISRAEL; IT = ITALY; IV = COTE D'IVOIRE (in ATCCIS, "Ivory Coast"); IY = Iraq; Saudi Arabia Neutral Zone (from ATCCIS); IZ = IRAQ; JA = JAPAN; JE = JERSEY; JM = JAMAICA; JN = JAN MAYEN; JO = JORDAN; JQ = JOHNSTON ATOLL; JU = JUAN DE NOVA ISLAND; KE = KENYA; KG = KYRGYZSTAN (ATCCIS uses domain value "KY"); KN = KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF (in ATCCIS, "Korea"); KQ = KINGMAN REEF; KR = KIRIBATI; KS = KOREA, REPUBLIC OF (in ATCCIS, "Korea"); KT = CHRISTMAS ISLAND; KU = KUWAIT; KZ = KAZAKHSTAN; LA = LAOS; LE = LEBANON; LG = LATVIA (ATCCIS uses domain value "LV"); LH = LITHUANIA; LI = LIBERIA; LO = SLOVAKIA (Not in ATCCIS); LQ = PALMYRA ATOLL; LS = LIECHTENSTEIN; LT = LESOTHO; LU = LUXEMBOURG; LY = LIBYA; MA = MADAGASCAR; MB = MARTINIQUE (in ATCCIS, "Martinus"); MC = MACAU; MD = MOLDOVA (in ATCCIS, "Moldavia"); MF = MAYOTTE; MG = MONGOLIA; MH = MONTERRAT; MI = MALAWI; MK = MACEDONIA (ATCCIS uses domain value "ME"); ML = MALI; MM = Multinational (from ATCCIS); MN = MONACO; MO = MOROCCO; MP = MAURITIUS; MQ = MIDWAY ISLANDS; MR = MAURITANIA; MT = MALTA; MU = OMAN; MV = MALDIVES; MW = MONTENEGRO (Not in ATCCIS); MX = MEXICO; MY = MALAYSIA; MZ = MOZAMBIQUE; NC = NEW CALEDONIA; NE = NIUE; NF = NORFOLK ISLAND; NG = NIGER; NH = VANUATU; NI = NIGERIA; NL = NETHERLANDS; NO = NORWAY; = ; NP = NEPAL; NQ = Trust Territory of the Pacific Islands (from ATCCIS); NR = NAURU; NS = SURINAME; NT = NETHERLANDS ANTILLES (ATCCIS uses domain value "NA"; "NT" in ATCCIS is "NATO"); NU = NICARAGUA; NZ = NEW ZEALAND; OR = Orange (from ATCCIS); PA = PARAGUAY; PC = PITCAIRN ISLANDS; PE = PERU; PF = PARACEL ISLANDS; PG = SPRATLY ISLANDS; PK = PAKISTAN; PL = POLAND; PM = PANAMA; PO = PORTUGAL; PP = PAPUA NEW GUINEA; PS = PALAU; PU = GUINEA-BISSAU; QA = QATAR; RE = REUNION; RM = MARSHALL ISLANDS (Not in ATCCIS); RO = ROMANIA; RP =</p>	

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Entity Name	Attribute Name	Col. Name	Domain	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
								PHILIPPINES; RQ = PUERTO RICO; RS = RUSSIA; RW = RWANDA; SA = SAUDI ARABIA; SB = ST. PIERRE AND MIQUELON; SC = ST. KITTS AND NEVIS (in ATCCIS, "St. Christopher and Nevis"); SE = SEYCHELLES; SF = SOUTH AFRICA; SG = SENEGAL; SH = ST. HELENA; SI = SLOVENIA; SL = SIERRA LEONE; SM = SAN MARINO; SN = SINGAPORE; SO = SOMALIA; SP = SPAIN; SR = SERBIA (in ATCCIS, "Slovak Republic"); ST = ST. LUCIA; SU = SUDAN; SV = SVALBARD; SW = SWEDEN; SX = SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS (Not in ATCCIS); SY = SYRIA; SZ = SWITZERLAND; TD = TRINIDAD AND TOBAGO; TE = TROMELIN ISLAND; TH = THAILAND; TI = TAJIKISTAN; TK = TURKS AND CAICOS ISLANDS; TL = TOKELAU; TN = TONGA; TO = TOGO; TP = SAO TOME AND PRINCE; TS = TUNISIA; TU = TURKEY; TV = TUVALU; TW = TAIWAN; TX = TURKMENISTAN; TZ = TANZANIA; UG = UGANDA; UK = UNITED KINGDOM; UP = UKRAINE (ATCCIS uses domain value "UA"); US = UNITED STATES; UV = BURKINA; UY = URUGUAY; UZ = UZBEKISTAN; VC = ST. VINCENT AND THE GRENADINES; VE = VENEZUELA; VI = BRITISH VIRGIN ISLANDS; VM = VIETNAM; VQ = VIRGIN ISLANDS; VT = VATICAN CITY; WA = NAMIBIA; WE = WEST BANK; WF = WALLIS AND FUTUNA; WI = WESTERN SAHARA; WQ = WAKE ISLAND; WS = SAMOA (in ATCCIS, "Western Samoa"); WZ = SWAZILAND; YM = YEMEN (in ATCCIS, "YS" represents "Yemen (Aden)" and "YE" represents "Yemen (Sanaa)"); ZA = ZAMBIA; ZI = ZIMBABWE. Sources: DDDS (May 2000) and ATCCIS Generic Hub 4 (LC2IEDM).	
POINT-OF-CONTACT	ORGANIZATION IDENTIFIER	ORG_id	Id(int)	int	NULL	No	Yes	(78751) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	
POINT-OF-CONTACT	POINT-OF-CONTACT Address Line1 Text	POC_Adr_s_Line1_tx	String	varchar(9)	NULL	No	No	POC street/office address. Source: SIMO.	
POINT-OF-CONTACT	POINT-OF-CONTACT Address Line2 Text	POC_Adr_s_Line2_tx	String	varchar(9)	NULL	No	No	POC additional street/office address information. Source: SIMO.	
POINT-OF-CONTACT	POINT-OF-CONTACT City Text	POC_city_tx	String	varchar(9)	NULL	No	No	POC city/place address. Source: SIMO.	
POINT-OF-CONTACT	POINT-OF-CONTACT Commercial Phone Number Text	POC_com_phn_tx	String	varchar(20)	NULL	No	No	Phone number for POC. Source: SIMO.	
POINT-OF-CONTACT	POINT-OF-CONTACT FAX Number Text	POC_fax_nr_tx	String	varchar(20)	NULL	No	No	The FAX number for the POC. Source: SIMO.	
POINT-OF-CONTACT	POINT-OF-CONTACT First Name	POC_firs_t_nm	Name	varchar(50)	NULL	No	No	The given name for a specific POINT-OF-CONTACT.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
POINT-OF-CONTACT	POINT-OF-CONTACT Government Phone Number Text	POC_government_phone_number_text	String	varchar(20)	NULL	No	No	Government phone number for POC; example: DSN. Source: SIMO.	
POINT-OF-CONTACT	POINT-OF-CONTACT Identifier	POC_id	Id(int)	int	NOT NULL	Yes	No	The unique identifier of a specific POINT-OF-CONTACT.	
POINT-OF-CONTACT	POINT-OF-CONTACT Last Name	POC_last_nm	Name	varchar(50)	NULL	No	No	The family name for a specific POINT-OF-CONTACT.	
POINT-OF-CONTACT	POINT-OF-CONTACT Middle Initial Text	POC_middle_initial_text	String	varchar(2)	NULL	No	No	The letter(s) representing the middle name of a POINT-OF-CONTACT.	
POINT-OF-CONTACT	POINT-OF-CONTACT Office Name	POC_office_nm	Name	varchar(50)	NULL	No	No	Office name for the POC. Source: SIMO.	
POINT-OF-CONTACT	POINT-OF-CONTACT Office Symbol Text	POC_office_symbol_text	String	varchar(20)	NULL	No	No	The text that abbreviates the name of the position held by a specific POINT-OF-CONTACT.	
POINT-OF-CONTACT	POINT-OF-CONTACT Position Name	POC_position_nm	Name	varchar(50)	NULL	No	No	The name of the primary assigned role for a specific POINT-OF-CONTACT in an ORGANIZATION.	
POINT-OF-CONTACT	POINT-OF-CONTACT Postal Zone Identifier	POC_postal_zone_id	String	varchar(10)	NULL	No	No	The identifier that represents the area used for postal deliveries for a specific POINT-OF-CONTACT.	
POINT-OF-CONTACT	POINT-OF-CONTACT SCI Email Address Text	POC_sci_email_text	String	varchar(100)	NULL	No	No	The SCI Email address for the POC. Source: SIMO.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
POINT-OF-CONTACT	POINT-OF-CONTACT State Alphabetic Code	POC_sta te_alpha _cd	String	varchar(20)	NULL	No	No	The code that denotes a specific state, territory, or possession of the United States for a specific POINT-OF-CONTACT.	AK--ALASKA; AL--ALABAMA; AR--ARKANSAS; AS--AMERICAN SAMOA; AZ--ARIZONA; CA--CALIFORNIA; CO--COLORADO; CT--CONNECTICUT; DC--DISTRICT OF COLUMBIA; DE--DELAWARE; FL--FLORIDA; FM--FEDERATED STATES OF MICRONESIA; GA--GEORGIA; GU--GUAM; HI--HAWAII; IA--IOWA; ID--IDAHO; IL--ILLINOIS; IN--INDIANA; KS--KANSAS; KY--KENTUCKY; LA--LOUISIANA; MA--MASSACHUSETTS; MD--MARYLAND; ME--MAINE; MI--MICHIGAN; MN--MINNESOTA; MO--MISSOURI; MP--NORTHERN MARIANA ISLANDS; MS--MISSISSIPPI; MT--MONTANA; NC--NORTH CAROLINA; ND--NORTH DAKOTA; NE--NEBRASKA; NH--NEW HAMPSHIRE; NJ--NEW JERSEY; NM--NEW MEXICO; NV--NEVADA; NY--NEW YORK; OH--OHIO; OK--OKLAHOMA; OR--OREGON; PA--PENNSYLVANIA; PR--PUERTO RICO; PW--PALAU; RI--RHODE ISLAND; SC--SOUTH CAROLINA; SD--SOUTH DAKOTA; TN--TENNESSEE; TX--TEXAS; UM--UNITED STATES MINOR OUTLYING ISLANDS; UT--UTAH; VA--VIRGINIA; VI--VIRGIN ISLANDS OF THE UNITED STATES; VT--VERMONT; WA--WASHINGTON; WI--WISCONSIN; WV--WEST VIRGINIA; WY--WYOMING. (Source: UNITED-STATES-STATE Alpha Code, DDDS, approved)
POINT-OF-CONTACT	POINT-OF-CONTACT Title	POC_title_nm	Name	varchar(50)	NULL	No	No	The title of the POC; rank/grade, Mr., Mrs., or other professional title. Source: SIMO.	
POINT-OF-CONTACT	POINT-OF-CONTACT Unclassified EMail Address Text	POC_uncl_email_tx	String	varchar(100)	NULL	No	No	The unclassified EMail address for the POC. Source: SIMO.	
POINT-OF-CONTACT	Uniformed Service Rank ORGANIZATION Identifier	UnSvcRank_ORG_Id	Id(int)	int	NULL	No	Yes	(78751) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
POINT-OF-CONTACT	UNIFORMED-SERVICE-RANK CODE	UNSVCR NK_cd	Code_smallint	smallint	NULL	No	Yes	(23513) (A) THE CODE THAT REPRESENTS A UNIFORMED-SERVICE-RANK.	01--ADMIRAL; 02--AIRMAN; 03--AIRMAN BASIC; 04--AIRMAN FIRST CLASS; 05--BRIGADIER GENERAL; 06--CAPTAIN; 07--CHIEF MASTER SERGEANT; 08--CHIEF MASTER SERGEANT OF THE AIR FORCE; 09--CHIEF PETTY OFFICER; 10--CHIEF WARRANT OFFICER FIVE; 11--CHIEF WARRANT OFFICER FOUR; 12--CHIEF WARRANT OFFICER THREE; 13--CHIEF WARRANT OFFICER TWO; 14--COLONEL; 15--COMMAND SERGEANT MAJOR; 16--COMMANDER; 17--CORPORAL; 18--ENSIGN; 19--FIRST LIEUTENANT; 20--FIRST SERGEANT; 21--FLEET ADMIRAL; 22--GENERAL; 23--GENERAL OF THE AIR FORCE; 24--GENERAL OF THE ARMY; 25--GUNNERY SERGEANT; 26--LANCE CORPORAL; 27--LIEUTENANT; 28--LIEUTENANT COLONEL; 29--LIEUTENANT COMMANDER; 30--LIEUTENANT GENERAL; 31--LIEUTENANT JUNIOR GRADE; 32--MAJOR; 33--MAJOR GENERAL; 34--MASTER CHIEF PETTY OFFICER; 35--MASTER CHIEF PETTY OFFICER OF THE COAST GUARD; 36--MASTER GUNNERY SERGEANT; 38--MASTER SERGEANT; 39--MASTER WARRANT OFFICER; 40--PLATOON SERGEANT; 41--PETTY OFFICER FIRST CLASS; 42--PETTY OFFICER SECOND CLASS; 43--PETTY OFFICER THIRD CLASS; 44--PRIVATE-1; 45--PRIVATE-2; 46--PRIVATE FIRST CLASS; 47--REAR ADMIRAL LOWER HALF; 48--REAR ADMIRAL UPPER HALF; 49--SEAMAN; 50--SEAMAN APPRENTICE; 51--SEAMAN RECRUIT; 52--SERGEANT MAJOR; 53--SECOND LIEUTENANT; 54--SENIOR AIRMAN; 55--SENIOR CHIEF PETTY OFFICER; 56--SENIOR MASTER SERGEANT; 57--SERGEANT; 58--SERGEANT FIRST CLASS; 59--SERGEANT MAJOR OF THE ARMY; 60--SERGEANT MAJOR OF THE MARINE CORPS; 61--SPECIALIST; 62--STAFF SERGEANT; 63--TECHNICAL SERGEANT; 64--VICE ADMIRAL; 65--WARRANT OFFICER ONE; 66--CADET; 67--MIDSHIPMAN; 68--OFFICER CANDIDATE; 69--AIRMAN APPRENTICE; 70--AIRMAN RECRUIT; 71--FIREMAN; 72--FIREMAN APPRENTICE; 73--FIREMAN RECRUIT. (DDDS, approved)
POINT-OF-CONTACT	United States State COUNTRY-DIVISION Identifier	CPD_id	String	varchar(35)	NULL	No	Yes	(18906) (A) THE IDENTIFIER THAT REPRESENTS A COUNTRY-PRINCIPAL-DIVISION.	
PROCESS-ACTIVITY	PROCESS-ACTIVITY Category Code	PA_cat_cd	Code_smallint	smallint	NULL	No	No	The code that denotes the class of a PROCESS-ACTIVITY.	1--Data store; 2--System function; 8--Not specified; 9--Not known.
PROCESS-ACTIVITY	PROCESS-ACTIVITY CREATION DATE	PA_creation_date	Date	datetime	NULL	No	No	(20453/2) (A) THE ORIGINATION DATE OF A PROCESS-ACTIVITY.	
PROCESS-ACTIVITY	PROCESS-ACTIVITY DEFINITION TEXT	PA_definition_text	String	varchar(8000)	NULL	No	No	(20253/2) (A) THE DEFINING TEXT OF A PROCESS-ACTIVITY.	
PROCESS-ACTIVITY	PROCESS-ACTIVITY IDENTIFIER	PA_id	Id(int)	int	NOT NULL	Yes	No	(29165/2) (A) THE IDENTIFIER THAT REPRESENTS A PROCESS-ACTIVITY.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
PROCESS-ACTIVITY	PROCESS-ACTIVITY NAME	PA_nm	String	varchar(255)	NULL	No	No	(20251/2) (A) THE NAME OF A PROCESS-ACTIVITY.	
PROCESS-ACTIVITY	PROCESS-ACTIVITY SCOPE DESCRIPTION TEXT	PA_scp_descrx	String	varchar(2000)	NULL	No	No	(25942/2) (A) THE TEXT THAT DESCRIBES THE EXTENT OF A PROCESS-ACTIVITY.	
PROCESS-ACTIVITY	PROCESS-ACTIVITY SOURCE DOCUMENT TEXT	PA_src_docrx	String	varchar(8000)	NULL	No	No	(20255/2) (A) THE TEXT OF THE ORIGINATION DOCUMENTATION OF A PROCESS-ACTIVITY.	
PROCESS-ACTIVITY	PROCESS-ACTIVITY Validation Indicator Code	PA_valid_ind_cd	Code_smallint	smallint	NULL	No	No	The code that indicates whether or not the PROCESS-ACTIVITY has been officially sanctioned by the user as part of the operational architecture development process. Source: Army Systems Architecture Data Model, modified during the CADM-ASA Workshop (17-19 June 1998).	1--Approved; 2--Proposed; 3--Draft; 4--Conceptual; Disapproved; 5--Archived; 8--Not specified; 9--Not known. Source: Army Systems Architecture Data Model, modified during the CADM-ASA Workshop (17-19 June 1998).
PROCESS-ACTIVITY	PROCESS-ACTIVITY VERSION IDENTIFIER	PA_vers_id	String	varchar(20)	NULL	No	No	(20252/2) (A) THE IDENTIFIER THAT REPRESENTS A RENDITION OF A PROCESS-ACTIVITY.	
PROCESS-ACTIVITY-ASSOCIATION {JCAPS}	Child PROCESS-ACTIVITY-Identifier	Child_PA_id	Id(int)	int	NOT NULL	Yes	Yes	(29165/2) (A) THE IDENTIFIER THAT REPRESENTS A PROCESS-ACTIVITY.	
PROCESS-ACTIVITY-ASSOCIATION {JCAPS}	Parent PROCESS-ACTIVITY-Identifier	Parent_PA_id	Id(int)	int	NOT NULL	Yes	Yes	(29165/2) (A) THE IDENTIFIER THAT REPRESENTS A PROCESS-ACTIVITY.	
PROCESS-ACTIVITY-ASSOCIATION {JCAPS}	PROCESS-ACTIVITY-ASSOCIATION Identifier	PAA_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a PROCESS-ACTIVITY-ASSOCIATION for a specific parent PROCESS-ACTIVITY and a specific child PROCESS-ACTIVITY. Source: JCAPS 2.1 (PRCS_ACTY_DERIV).	
PROCESS-ACTIVITY-ASSOCIATION {JCAPS}	PROCESS-ACTIVITY-ASSOCIATION Role Code	PAA_role_cd	Code_smallint	smallint	NULL	No	No	The code that represents the way in which the parent PROCESS-ACTIVITY is related to the child PROCESS-ACTIVITY in the PROCESS-ACTIVITY-ASSOCIATION. 1 = Is derived from; 2 = Is identical to; 3 = Replaces; 8 = Not specified; 9 = Not known. Source: JCAPS 2.1 (PRCS_ACTY_DERIV).	
PROCESS-ACTIVITY-TASK	Activity Model INFO-ASSET Identifier	Actv_Mdl_JA_id	Id(int)	int	NULL	No	Yes	(20393/2) (A) THE IDENTIFIER THAT REPRESENTS AN INFORMATION-ASSET.	
PROCESS-ACTIVITY-TASK	PROCESS-ACTIVITY IDENTIFIER	PA_id	Id(int)	int	NOT NULL	Yes	Yes	(29165/2) (A) THE IDENTIFIER THAT REPRESENTS A PROCESS-ACTIVITY.	
PROCESS-ACTIVITY-TASK	PROCESS-ACTIVITY-TASK Identifier	PA_Tsk_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a PROCESS-ACTIVITY-TASK for a specific PROCESS-ACTIVITY and a specific TASK.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
PROCESS-ACTIVITY-TASK	TASK IDENTIFIER	TSK_id	Id(int)	int	NOT NULL	Yes	Yes	(9282) (A) THE IDENTIFIER THAT REPRESENTS A TASK.	
REQUIRED-INTEROPERABILITY-CAPABILITY	CAPABILITY IDENTIFIER	CAP_id	Id(int)	int	NOT NULL	Yes	Yes	(11287) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC CAPABILITY. The following instances of CAPABILITY are needed: Mean Time Between Failures, Mean Time Between Software Faults; Availability; System Initialization Time; Data Transfer Rate; Program Restart Time; Data Throughput/Capacity; Input Type Response Time; Operator Interaction Type Response Time. [10-character (max) string]	
REQUIRED-INTEROPERABILITY-CAPABILITY	CONDITION Identifier	COND_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific CONDITION.	
REQUIRED-INTEROPERABILITY-CAPABILITY	IMPLEMENTATION-TIME-FRAME Code	IMPL_TF_cd	Code_smallint	smallint	NULL	No	Yes	The code that represents a specific IMPLEMENTATION-TIME-FRAME. 1--Baseline; 2--Intermediate; 3--Objective; 8--Not specified; 9--Not known (Source: Attribute Tables for Products, Draft, Framework Panel (Anne Reedy), 19 June 1997)	
REQUIRED-INTEROPERABILITY-CAPABILITY	Interop Req GUIDANCE Identifier	Req_GUID_id	Id(int)	int	NOT NULL	Yes	Yes	(12090/2) (A) THE IDENTIFIER THAT REPRESENTS AN OCCURRENCE OF GUIDANCE.	
REQUIRED-INTEROPERABILITY-CAPABILITY	REQUIRED-INTEROPERABILITY-CAPABILITY Effective Date	REQIOP_AP_eff_dt	Date	datetime	NULL	No	No	The beginning of the period at which a CAPABILITY is specified for a REQUIREMENT.	
REQUIRED-INTEROPERABILITY-CAPABILITY	REQUIRED-INTEROPERABILITY-CAPABILITY Identifier	REQIOP_AP_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a REQUIRED-CAPABILITY for a specific REQUIREMENT and a specific CAPABILITY.	
REQUIRED-INTEROPERABILITY-CAPABILITY	REQUIRED-INTEROPERABILITY-CAPABILITY Measurement Unit Quantity	REQIOP_AP_measurement_qty	Number, Real	float	NULL	No	No	The value of a specific CAPABILITY that is specified in a specific REQUIREMENT.	
SECURITY-ACCESS-COMPARTMENT	SECURITY-ACCESS-COMPARTMENT IDENTIFIER	SAC_ID	Id(int)	int	NOT NULL	Yes	No	(56872/1) (A) THE IDENTIFIER OF A SPECIFIC SECURITY-ACCESS-COMPARTMENT. NOTE: BLOCKS OF IDENTIFIERS WILL BE ALLOCATED TO DEFENSE ORGANIZATIONS. IT WILL BE UP TO EACH DEFENSE ORGANIZATION TO ALLOCATE AND CONFIGURATION MANAGE ITS OWN IDENTIFIERS.	
SECURITY-ACCESS-COMPARTMENT	SECURITY-ACCESS-COMPARTMENT NAME	SAC_NM	Name	varchar(50)	NULL	No	No	(56874/1) (A) THE NAME OF A SPECIFIC SECURITY-ACCESS-COMPARTMENT.	
SECURITY-ACCESS-COMPARTMENT	SECURITY-CLASSIFICATION CODE	SC_cd	Code_smallint	smallint	NULL	No	Yes	(26900/3) (A) THE CODE THAT REPRESENTS A SECURITY-CLASSIFICATION. (DDDS, 10 August 2000) 01 = CONFIDENTIAL; 02 = CONFIDENTIAL RESTRICTED; 03 = FOR OFFICIAL USE ONLY; 04 = NATO CONFIDENTIAL; 05 = NATO CONFIDENTIAL ATOMAL; 06 = NATO RESTRICTED; 07 = NATO SECRET; 08 = NATO SECRET ATOMAL; 09 = NATO TOP SECRET; 10 = NATO TOP SECRET ATOMAL; 11 = SECRET; 12 = SECRET RESTRICTED; 13 = TOP SECRET; 14 = UNCLASSIFIED; 15 = UNCLASSIFIED SENSITIVE; 98 = NOT SPECIFIED; 99 = NOT KNOWN (DDDS, 10 August 2000)	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
SECURITY-CLASSIFICATION	SECURITY-CLASSIFICATION CODE	SC_cd	Code_smallint	smallint	NOT NULL	Yes	No	(26900/3) (A) THE CODE THAT REPRESENTS A SECURITY-CLASSIFICATION. (DDDS, 10 August 2000)	01 = CONFIDENTIAL; 02 = CONFIDENTIAL RESTRICTED; 03 = FOR OFFICIAL USE ONLY; 04 = NATO CONFIDENTIAL; 05 = NATO CONFIDENTIAL ATOMAL; 06 = NATO RESTRICTED; 07 = NATO SECRET; 08 = NATO SECRET ATOMAL; 09 = NATO TOP SECRET; 10 = NATO TOP SECRET ATOMAL; 11 = SECRET; 12 = SECRET RESTRICTED; 13 = TOP SECRET; 14 = UNCLASSIFIED; 15 = UNCLASSIFIED SENSITIVE; 98 = NOT SPECIFIED; 99 = NOT KNOWN (DDDS, 10 August 2000)
SECURITY-CLASSIFICATION	SECURITY-CLASSIFICATION DESCRIPTION TEXT	SC_desc_r_tx	String	varchar(250)	NULL	No	No	(26901) (A) THE TEXT THAT DESCRIBES A SECURITY-CLASSIFICATION.	
SECURITY-CLASSIFICATION	SECURITY-CLASSIFICATION DOWNGRADE INSTRUCTION TEXT	SC_DW_NGRD_JNSTR_TX	String	varchar(2000)	NULL	No	No	(51054/2) (A) THE TEXT THAT EXPLAINS PROCEDURES FOR LOWERING A CURRENT SECURITY-CLASSIFICATION.	
SECURITY-CLASSIFICATION	SECURITY-CLASSIFICATION NAME	SC_nm	Name	varchar(50)	NULL	No	No	The name of a specific SECURITY-CLASSIFICATION.	
SECURITY-CLASSIFICATION	SECURITY-CLASSIFICATION STATUS CODE	SCRT_CLSFCTN_ST_CD	String	char(1)	NULL	No	No	(51047/1) (A) THE CODE THAT DENOTES THE STATE OF A SECURITY-CLASSIFICATION.	A = CURRENT SECURITY-CLASSIFICATION B = PROPOSED SECURITY-CLASSIFICATION (DDDS, 10 August 2000)
SOFTWARE-ITEM	Software Application INFO-ASSET Identifier	IA_id	Id(int)	int	NULL	No	Yes	(20399/2) (A) THE IDENTIFIER THAT REPRESENTS AN INFORMATION-ASSET.	
SOFTWARE-ITEM	Software Item MATERIEL-ITEM Identifier	MATI_id	Id(int)	int	NOT NULL	Yes	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	
SOFTWARE-ITEM	SOFTWARE-ITEM Abbreviated Name {JCAPS}	SWI_abbrev_nm	Name	varchar(50)	NULL	No	No	THE SHORT NAME OF A SOFTWARE-ITEM.	Source: JCAPS 2.1 (SW_IT_AB_NM).
SOFTWARE-ITEM	SOFTWARE-ITEM Build Identifier	SWI_build_id	String	varchar(50)	NULL	No	No	The identifier for a specific integration event for a SOFTWARE-ITEM.	
SOFTWARE-ITEM	SOFTWARE-ITEM Build Status Code {JCAPS}	SWI_bid_sta_cd	Code_smallint	smallint	NULL	No	No	THE CODE THAT DENOTES THE STATUS OF A SOFTWARE-ITEM BUILD.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (SW_IT_BLD_ST_CD).
SOFTWARE-ITEM	SOFTWARE-ITEM Category Code	SWI_cat_cd	Code_smallint	smallint	NULL	No	No	The code the denotes the class of a SOFTWARE-ITEM. It serves as a discriminator for subtypes of SOFTWARE-ITEM.	1--Application Software; 2--Communication Software; 3--Data Encryption Software; 4--System Software; 5--Security Software; 8--Not specified; 9--Not known. Added for JCAPS: 10 = Operating System; 11 = Operating Environment. Source: JCAPS IDD. Note: An alternative (suggested by BMDO) would be to use the values Conventional, Library, and Object-Oriented and to specify the other values as a category code of CONVENTIONAL-SOFTWARE-ITEM.

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Annex M (Proposed Attribute Specifications)

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Proposed JCAPS View of the CADM

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
SOFTWARE-ITEM	SOFTWARE-ITEM Comment Text {JCAPS}	SWI_cmt_tx	String	varchar(2000)	NULL	No	No	THE TEXT THAT AMPLIFIES A SOFTWARE-ITEM.	Source: JCAPS 2.1 (SW_IT_CM_TX).
SOFTWARE-ITEM	SOFTWARE-ITEM COTS Indicator Code	SWI_cots_ind_cd	Code_smallint	smallint	NULL	No	No	The code that designates whether a specific SOFTWARE-ITEM is available as a commercial off-the-shelf product.	1--Yes a COTS product; 2--No, not a COTS product; 8--Not specified; 9--Not known.
SOFTWARE-ITEM	SOFTWARE-ITEM CPU Requirement Text {JCAPS}	SWI_cpu_req_tx	String	varchar(20)	NULL	No	No	The text that characterizes the speed and other characteristics of a central processing unit in order to satisfactorily operate the SOFTWARE-ITEM.	Source: JCAPS 2.1 (SW_IT_CPU_REQ_TX).
SOFTWARE-ITEM	SOFTWARE-ITEM Description Text	SWI_desc_tx	Text(8000)	varchar(8000)	NULL	No	No	The text that summarizes a SOFTWARE-ITEM.	
SOFTWARE-ITEM	SOFTWARE-ITEM DII COE Compliance Code {JCAPS}	SWI_DII_COE_cm_p_cd	Code_smallint	smallint	NULL	No	No	THE CODE THAT DENOTES WHETHER OR NOT THE CURRENT VERSION OF A SOFTWARE-ITEM COMPLIES WITH THE DII COE.	Values are 0, 1, 2, 3, 4, 5, 6, 7, and 8 from Defense Information Infrastructure Common Operating Environment (DII COE) compliance codes. Source: JCAPS IDD for JCAPS 2.1 (SW_IT_DII_COE_CP_CD).
SOFTWARE-ITEM	SOFTWARE-ITEM Disk Space Requirement Text {JCAPS}	SWI_dsk_spc_req_tx	String	varchar(2000)	NULL	No	No	THE TEXT THAT DESCRIBES THE DISK SPACE REQUIRED FOR A SOFTWARE-ITEM.	Source: JCAPS 2.1 (SW_IT_DK_SP_REQ_TX).
SOFTWARE-ITEM	SOFTWARE-ITEM DMS Compliance Code {JCAPS}	SWI_DM_S_cmp_cd	Code_smallint	smallint	NULL	No	No	THE CODE THAT DENOTES WHETHER OR NOT THE CURRENT VERSION OF A SOFTWARE-ITEM COMPLIES WITH THE DEFENSE MESSAGING SYSTEM.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (SW_IT_DMS_CP_CD).
SOFTWARE-ITEM	SOFTWARE-ITEM GOTS Indicator Code	SWI_gots_ind_cd	Code_smallint	smallint	NULL	No	No	The code that designates whether a specific SOFTWARE-ITEM is available as a government-developed off-the-shelf product.	1--Yes a GOTS product; 2--No, not a GOTS product; 8--Not specified; 9--Not known.
SOFTWARE-ITEM	SOFTWARE-ITEM Long Name {JCAPS}	SWI_long_nm	String	varchar(250)	NULL	No	No	THE FULL LENGTH NAME OF A SOFTWARE-ITEM.	Source: JCAPS 2.1 (SW_IT_LG_NM).
SOFTWARE-ITEM	SOFTWARE-ITEM Manufacturer Name {JCAPS}	SWI_manu_nm	String	varchar(250)	NULL	No	No	THE NAME OF THE MANUFACTURER OF A SOFTWARE-ITEM.	Source: JCAPS 2.1 (SW_IT_MFG_NM).
SOFTWARE-ITEM	SOFTWARE-ITEM Maximum Simultaneous User Quantity {JCAPS}	SWI_mx_sim_usr_qy	Number	float	NULL	No	No	THE MAXIMUM NUMBER OF SIMULTANEOUS USERS.	Source: JCAPS 2.1 (SW_IT_MS_SU_QY).
SOFTWARE-ITEM	SOFTWARE-ITEM Memory Requirement Text {JCAPS}	SWI_mem_req_tx	String	varchar(2000)	NULL	No	No	THE TEXT THAT DESCRIBES THE CENTRAL PROCESSING UNIT MEMORY CAPACITY REQUIRED FOR THE SOFTWARE-ITEM TO FUNCTION CORRECTLY.	Source: JCAPS 2.1 (SW_IT_MEM_REQ_TX).

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
SOFTWARE-ITEM	SOFTWARE-ITEM Operational Status Code {JCAPS}	SWI_op_sta_cd	Code_smallint	smallint	NULL	No	No	THE CODE THAT DENOTES THE OPERATIONAL STATUS OF THE CURRENT VERSION OF A SOFTWARE-ITEM.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (SW_IT_OP_ST_CD).
SOFTWARE-ITEM	SOFTWARE-ITEM Release Date	SWI_rel_dt	Date	datetime	NULL	No	No	The date a specific SOFTWARE-ITEM was distributed for general use.	
SOFTWARE-ITEM	SOFTWARE-ITEM Source Type Code {JCAPS}	SWI_src_ty_cd	Code_smallint	smallint	NULL	No	No	THE CODE THAT REPRESENTS THE SOURCE OF A SOFTWARE-ITEM.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (SW_IT_SR_TY_CD).
SOFTWARE-ITEM	SOFTWARE-ITEM Type Code {JCAPS}	SWI_ty_cd	Code_smallint	smallint	NULL	No	No	THE CODE THAT DENOTES A KIND OF SOFTWARE-ITEM.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (SW_IT_TY_CD).
SOFTWARE-ITEM	SOFTWARE-ITEM Version Description Text {JCAPS}	SWI_ver_s_desc_tx	String	varchar(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A SPECIFIC VERSION OF A SOFTWARE-ITEM.	Source: JCAPS 2.1 (SW_IT_VER_DTX).
SOFTWARE-ITEM	SOFTWARE-ITEM Version Identifier	SWI_ver_s_id	String	varchar(50)	NULL	No	No	The identifier of a specific release of the SOFTWARE-ITEM.	
SOFTWARE-ITEM	SOFTWARE-ITEM Version Operational Status Code {JCAPS}	SWI_ver_op_sta_cd	Code_smallint	smallint	NULL	No	No	THE CODE THAT DENOTES THE OPERATIONAL STATUS OF A PARTICULAR VERSION OF A SOFTWARE-ITEM.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (SW_IT_V_OP_ST_CD).
SOFTWARE-ITEM	SOFTWARE-ITEM Year 2000 Compliance Date {JCAPS}	SWI_Y2000_cmp_dt	DateTime	datetime	NULL	No	No	THE DATE BY WHICH A SOFTWARE-ITEM WILL COMPLY WITH YEAR 2000 REQUIREMENTS.	Source: JCAPS 2.1 (SW_IT_Y2000_C_DT).
SOFTWARE-ITEM	SOFTWARE-ITEM Year 2000 Compliance Level Code {JCAPS}	SWI_Y2000_cmp_lv_cd	Code_smallint	smallint	NULL	No	No	The code that represents the degree to which the SOFTWARE-ITEM conforms to stated guidance on handling dates in multiple centuries. 1 = Level 0 - Retired; 2 = Level 1a - Indep. testing - Full capability; 3 = Level 1b - Indep. testing - Partial dual year capability; 4 = Level 1c - Indep. testing - Partial single year capability; 5 = Level 2a - Indep. audit of testing - Full capability; 6 = Level 2b - Indep. audit of testing - Partial dual year capability; 7 = Level 2c - Indep. audit of testing - Partial single year capability; 8 = Level 3a - Self-certification - Full capability; 9 = Level 3b - Self-certification - Partial dual year capability; 10 = Level 3c - Self-certification - Partial single year capability; 11 = Level 4 - Non-compliance; 98 = Not specified; 99 = Not known. Source: JCAPS IDD for JCAPS 2.1 (SW_IT_Y2K_COMP_LVL_CD).	
SOFTWARE-ITEM	SOFTWARE-ITEM Year 2000 Compliance Status Text {JCAPS}	SWI_Y2000_cst_tx	String	varchar(2000)	NULL	No	No	THE TEXT THAT DESCRIBES THE CURRENT STATUS OF THE COMPLIANCE OF A SOFTWARE-ITEM WITH YEAR 2000 REQUIREMENTS.	Source: JCAPS 2.1 (SW_IT_Y2000_CST_TX).

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
SOFTWARE-ITEM	SOFTWARE-ITEM Year 2000 Phase Name {JCAPS}	SWI_Y2000_ph_nm	String	varchar(250)	NULL	No	No	THE NAME OF THE SOFTWARE DEVELOPMENT PHASE OF A SOFTWARE-ITEM RELATIVE TO THE YEAR 2000 REQUIREMENT.	Source: JCAPS 2.1 (SW_IT_Y2000_PH_NM).
SOFTWARE-ITEM	Supplier ORGANIZATION Identifier	ORG_id	Id(int)	int	NULL	No	Yes	(7875/1) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	
SOFTWARE-ITEM-ASSOCIATION {ASA}	Ordinate Software Item MATERIAL-ITEM Identifier	Ord_SWI_MATL_id	Id(int)	int	NOT NULL	Yes	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	
SOFTWARE-ITEM-ASSOCIATION {ASA}	SOFTWARE-ITEM-ASSOCIATION Identifier	SIA_ID	Id(int)	int	NOT NULL	Yes	No	The identifier of a SOFTWARE-ITEM-ASSOCIATION for a specific ordinate SOFTWARE-ITEM and a specific ordinate.	
SOFTWARE-ITEM-ASSOCIATION {ASA}	SOFTWARE-ITEM-ASSOCIATION Type Code	SIA_ty_cd	Code_smallint	smallint	NULL	No	No	The code that denotes a class of SOFTWARE-ITEM-ASSOCIATION.	1--Requires as supporting software; 2--Requires as part of the operating system; 3--Interfaces directly to; 4--Has as a part; 5--Is provided as part of; 6--Other; 8--Not specified; 9--Not known.
SOFTWARE-ITEM-ASSOCIATION {ASA}	Subordinate Software Item MATERIAL-ITEM Identifier	Sub_SWI_MATL_id	Id(int)	int	NOT NULL	Yes	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	
STANDARD	Standard AGREEMENT Identifier	Std_AGR_id	Id(int)	int	NOT NULL	Yes	Yes	(12495) (A) THE IDENTIFIER THAT REPRESENTS AN AGREEMENT.	
STANDARD	STANDARD Category Code	STD_cat_cd	Code_smallint	smallint	NULL	No	No	The code that denotes a class of STANDARD. It is used as a discriminator for subtypes of STANDARD.	1--Application Program Interface Standard; 2--Data Standard; 3--Data Model Standard; 4--Message Standard; 5--Protocol Standard; 6--Hardware Standard; 7--Software Standard; and 8--Process Standard. Note: Domain expanded during the CADM-ASA Workshop (17-19 June 1998). Added for Army CADM: 98--Not specified; 99--Not known.
STANDARD	STANDARD Criterion Description Text	STD_crit_descr_tx	String	varchar(8000)	NULL	No	No	The text that summarizes the parameters against which a standard is to be evaluated.	
STANDARD	STANDARD Developmental Status Code	STD_dev_sta_cd	Code_smallint	smallint	NULL	No	No	The code that indicates the approval status of a standards document.	1--Concept draft; Working draft; 2--Committee draft; 3--Final review draft; 4--Adopted; 5--Withdrawn; 8--Not specified; 9--Not known. Note: Domain expanded during the CADM-ASA Workshop (17-19 June 1998).
STANDARD	STANDARD Measure Description Text	STD_meas_desc_tx	String	varchar(150)	NULL	No	No	The text that summarizes how a standard is to be applied.	
STANDARD	STANDARD Project-Specific Indicator Code	STD_prj_spc_ind_cd	Code_smallint	smallint	NULL	No	No	The code that indicates whether a specific STANDARD is used only for a specific implementation.	1--Generic; 2--Project-specific; 3--Profile-specific; 8--Not specified; 9--Not known. Note: Domain expanded during the CADM-ASA Workshop (17-19 June 1998).

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
SYSTEM	SYSTEM Acronym Text	SYS_acr on_tx	String	varchar(50)	NULL	No	No	The abbreviation of the name of a specific SYSTEM.	
SYSTEM	SYSTEM Description Text	SYS_des cr_tx	Text(255)	varchar(255)	NULL	No	No	The text that briefly characterizes a specific SYSTEM. Compare (DDDS, June 1998); SYSTEM DESCRIPTION TEXT--(44654/1) (D) THE TEXT THAT DESCRIBES A SYSTEM.	
SYSTEM	SYSTEM Identifier	SYS_id	Id(int)	int	NOT NULL	Yes	No	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
SYSTEM	SYSTEM Manufacturer Modification Text {JCAPS}	SYS_manu_mod_tx	String	varchar(50)	NULL	No	No	The text that characterizes changes made by the developer for this specific version of the SYSTEM. Source: JCAPS 2.1 (SY_TY_MFG_MOD_TXT).	
SYSTEM	SYSTEM Manufacturer Name {JCAPS}	SYS_manu_nm	String	varchar(50)	NULL	No	No	The name of the developer for this specific version of the SYSTEM. Source: JCAPS 2.1 (SY_TY_MFG_NAME).	
SYSTEM	SYSTEM Model Identifier {JCAPS}	SYS_mdi_id	String	varchar(50)	NULL	No	No	The identifier of this specific version of the SYSTEM. Source: JCAPS 2.1 (SY_MODEL).	
SYSTEM	SYSTEM Name	SYS_nm	Name	varchar(50)	NULL	No	No	Examples: AGCCS; ASAS; ATCCS; CTT/JTT; FAAD C2; GCCS; IMOM; JDISS; JMCIS; NEWS; RAAP; SSP-S. [250-character (max) string]	
SYSTEM	SYSTEM Nominal Users Quantity	SYS_nu_qty	Numb er	int	NULL	No	No	The number of persons that typically operate a specific SYSTEM at the same time.	
SYSTEM	SYSTEM Purpose Text	SYS_purp_tx	Text(255)	varchar(255)	NULL	No	No	The text that summarizes the objective of a specific SYSTEM.	
SYSTEM	SYSTEM Role Category Code	SYS_rol_cat_cd	Code_smallint	smallint	NULL	No	No	The code that denotes a class of role for a specific SYSTEM. 1--System Element, 2--Information Processing System, 3--Communication System, 8--Not Applicable, 9--Not Known.	
SYSTEM	SYSTEM Short Name	SYS_shrt_nm	String	varchar(20)	NULL	No	No	The name, in abbreviated format, of the Communication Electronic Material Type. Source: JCAPS 2.1 (SY_TY_SFT_INF_TXT).	
SYSTEM	SYSTEM Software Interface Text {JCAPS}	SYS_sw_intf_tx	String	varchar(2000)	NULL	No	No	The text that characterizes the software interfaces of this specific version of the SYSTEM.	
SYSTEM	SYSTEM Status Code {JCAPS}	SYS_sta_cd	Code_smallint	smallint	NULL	No	No	The code that represents the condition of this specific version of the SYSTEM. Source: JCAPS 2.1 (SY_TY_STAT_CD).	
SYSTEM	SYSTEM Unit Cost Amount	SYS_un_cst_amt	Money	money	NULL	No	No	The amount of the planning cost of a single instance of a system. ASA unit: U.S. dollars.	
SYSTEM	SYSTEM Version Name	SYS_ver_s_nm	Name	varchar(50)	NULL	No	No	The name that identifies a specific form of a specific SYSTEM.	
SYSTEM	SYSTEM Year 2000 Compliance Level Code {JCAPS}	SYS_Y2K_comp_lv_cd	Code_smallint	smallint	NULL	No	No	THE CODE WHICH REPRESENTS THE LEVEL OF Y2K COMPLIANCE THIS SYSTEM MEETS. 1 = Level 0 - Retired; 2 = Level 1a - Indep. testing - Full capability; 3 = Level 1b - Indep. testing - Partial dual year capability; 4 = Level 1c - Indep. testing - Partial single year capability; 5 = Level 2a - Indep. audit of testing - Full capability; 6 = Level 2b - Indep. audit of testing - Partial dual year capability; 7 = Level 2c - Indep. audit of testing - Partial single year capability; 8 = Level 3a - Self-certification - Full capability; 9 = Level 3b - Self-certification - Partial dual year capability; 10 = Level 3c - Self-certification - Partial single year capability; 11 = Level 4 - Non-compliance; 98 = Not specified; 99 = Not known. Source: JCAPS IDD for JCAPS 2.1 (Y2K_COMP_LVL_CD).	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
SYSTEM	SYSTEM-TYPE Identifier	SYST_id	Id(int)	int	NULL	No	Yes	A class of SYSTEM. Compare (DDDS, June 1998): SYSTEM-TYPE CODE--(33216/1) (D) THE CODE THAT REPRESENTS A SYSTEM-TYPE, whose domain values are not yet recorded in the DDDS. The identifier of a specific ARCHITECTURE.	
SYSTEM-ARCHITECTURE	ARCHITECTURE Identifier	ARCH_id	Id(int)	int	NOT NULL	Yes	Yes	The code that represents the planned use of the SYSTEM-ARCHITECTURE.	1 = Conceptual; 2 = Detailed; 8 = Not Specified; 9 = Not known.
SYSTEM-ARCHITECTURE	SYSTEM-ARCHITECTURE Role Code	SYSARC_H_role_cd	Code_smallint	smallint	NULL	No	No	The code that designates a class of SYSTEM-ARCHITECTURE.	1--Existing (unqualified); 2--Existing (planned upgrades); 3--Existing (to be deactivated); 4--Planned (unqualified); 5--Planned (to be deactivated); 6--Potential interface; 8 = Not Specified; 9 = Not known.
SYSTEM-ARCHITECTURE	SYSTEM-ARCHITECTURE Type Code	SYSARC_H_tv_cd	Code_smallint	smallint	NULL	No	No	(16225/1) (A) THE IDENTIFIER OF A CAVEATED-SECURITY-CLASSIFICATION. NOTE: BLOCKS OF IDENTIFIERS WILL BE ALLOCATED TO DEFENSE ORGANIZATIONS. IT WILL BE UP TO EACH DEFENSE ORGANIZATION TO ALLOCATE AND CONFIGURATION MANAGE ITS OWN IDENTIFIERS.	
SYSTEM-ASSOCIATION	CAVEATED-SECURITY-CLASSIFICATION IDENTIFIER	CSC_ID	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
SYSTEM-ASSOCIATION	Ordinate SYSTEM Identifier	Ord_SYS_id	Id(int)	int	NOT NULL	Yes	Yes	(26900/3) (A) THE CODE THAT REPRESENTS A SECURITY-CLASSIFICATION. (DDDS, 10 August 2000)	01 = CONFIDENTIAL; 02 = CONFIDENTIAL RESTRICTED; 03 = FOR OFFICIAL USE ONLY; 04 = NATO CONFIDENTIAL; 05 = NATO CONFIDENTIAL ATOMAL; 06 = NATO RESTRICTED; 07 = NATO SECRET; 08 = NATO SECRET ATOMAL; 09 = NATO TOP SECRET; 10 = NATO TOP SECRET ATOMAL; 11 = SECRET; 12 = SECRET RESTRICTED; 13 = TOP SECRET; 14 = UNCLASSIFIED; 15 = UNCLASSIFIED SENSITIVE; 98 = NOT SPECIFIED; 99 = NOT KNOWN (DDDS, 10 August 2000)
SYSTEM-ASSOCIATION	Subordinate SYSTEM Identifier	Sub_SYS_id	Id(int)	int	NOT NULL	Yes	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
SYSTEM-ASSOCIATION	SYSTEM-ASSOCIATION DESCRIPTION TEXT	SYSA_desc_tx	Text(255)	varchar(255)	NULL	No	No	The text that summarizes a SYSTEM-ASSOCIATION. Compare (DDDS, June 1998): SYSTEM-ASSOCIATION DESCRIPTION TEXT--(44669/1) (D) THE TEXT THAT DESCRIBES THE NATURE OF THE ASSOCIATION BETWEEN TWO SYSTEMS.	
SYSTEM-ASSOCIATION	SYSTEM-ASSOCIATION IDENTIFIER	SYSA_id	Id(int)	int	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A SYSTEM-ASSOCIATION.	
SYSTEM-ASSOCIATION	SYSTEM-ASSOCIATION Interface Status Code	SYSA_interface_status_cd	Code_smallint	smallint	NULL	No	No	The code that denotes the condition of interoperating relationship that exists between two SYSTEMS in a SYSTEM-ASSOCIATION.	1--Existing (unqualified); 2--Existing (planned upgrades); 3--Existing (to be deactivated); 4--Planned (unqualified); 5--Planned (to be deactivated); 6--Potential interface; 8--Not specified; 9--Not known.

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
SYSTEM-ASSOCIATION	SYSTEM-ASSOCIATION Interoperability Level Code	SYSA_introp_wl_cd	String	char(1)	NULL	No	No	The code that designates the applicable kind of interoperability specified in the C4ISR Architecture Framework for a SYSTEM-ASSOCIATION.	A--Universal (Virtual C4I System) Interoperability; B--Advanced (Integrated Systems) Interoperability; C--Intermediate (Distributed Systems) Interoperability; D--Basic (Discrete Systems Interaction) Interoperability. [Levels of Information System Interoperability, C4ISR Architecture Framework, Version 1]. Added for CADM 2.0: N--Not specified; X--Not known.
SYSTEM-ASSOCIATION	SYSTEM-ASSOCIATION Name	SYSA_nm	Name	varchar(50)	NULL	No	No	The name of a specific SYSTEM-ASSOCIATION.	
SYSTEM-ASSOCIATION	SYSTEM-ASSOCIATION Type Code	SYSA_ty_cd	Code_smallint	smallint	NULL	No	No	The code that designates a class of SYSTEM-ASSOCIATION.	1--Is a revision of; 2--Is an upgrade planned for; 3--Migrates from; 4--Replaces; 5--Is installed in; 6--Interfaces with; 7--Is a client for; 8--Is a server for; 9--Is an operating system for; 10--Provides office automation for; 11--Is a subsystem of; 12--Is a component of; 98--Not specified; 99--Not known (added for CADM 2.0). Note: The Ordinate SYSTEM is the "target" system (the end result). Added for C4RDP: 13--Ordinate is initiator and subordinate is receptor in.
SYSTEM-CAPABILITY	CAPABILITY IDENTIFIER	CAP_id	Id(int)	int	NOT NULL	Yes	Yes	(11287) (A) THE IDENTIFIER THAT REPRESENTS A SPECIFIC CAPABILITY.	The following instances of CAPABILITY are needed: Mean Time Between Failures, Mean Time Between Software Faults; Availability; System Initialization Time; Data Transfer Rate; Program Restart Time; Data Throughput/Capacity; Input Type Response Time; Operator Interaction Type Response Time. [10-character (max) string]
SYSTEM-CAPABILITY	IMPLEMENTATION-TIME-FRAME Code	IMPL_TF_cd	Code_smallint	smallint	NULL	No	Yes	The code that represents a specific IMPLEMENTATION-TIME-FRAME.	1--Baseline; 2--Intermediate; 3--Objective; 8--Not specified; 9--Not known [Source: Attribute Tables for Products, Draft, Framework Panel (Anne Reedy), 19 June 1997]
SYSTEM-CAPABILITY	PROCESS-ACTIVITY IDENTIFIER	PA_id	Id(int)	int	NULL	No	Yes	(29165/2) (A) THE IDENTIFIER THAT REPRESENTS A PROCESS-ACTIVITY.	
SYSTEM-CAPABILITY	SYSTEM Identifier	SYS_id	Id(int)	int	NOT NULL	Yes	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
SYSTEM-CAPABILITY	SYSTEM-CAPABILITY Description Text	SYSYC_desc_tx	String	varchar(8000)	NULL	No	No	(44679/1) (D) THE TEXT THAT DESCRIBES AN ASSOCIATION BETWEEN A SYSTEM AND A CAPABILITY.	
SYSTEM-CAPABILITY	SYSTEM-CAPABILITY Effective Date	SYSYC_eff_dt	Date	datetime	NULL	No	No	The date at which a SYSTEM-CAPABILITY is originally provided.	
SYSTEM-CAPABILITY	SYSTEM-CAPABILITY Estimated Accuracy Evaluation Code	SYSYC_est_acc_v_cd	Code_smallint	smallint	NULL	No	No	THE CODE THAT DENOTES THE GENERAL APPRAISAL OF A SPECIFIC SYSTEM-CAPABILITY INDICATING ITS DEGREE OF ACCURACY.	1--COMPLETELY RELIABLE; 2--USUALLY RELIABLE; 3--FAIRLY RELIABLE; 4--NOT USUALLY RELIABLE; 5--UNRELIABLE; 6--RELIABILITY CANNOT BE JUDGED
SYSTEM-CAPABILITY	SYSTEM-CAPABILITY Estimated Reliability Code	SYSYC_est_rel_cd	Code_smallint	smallint	NULL	No	No	THE CODE THAT DENOTES THE GENERAL APPRAISAL OF A SPECIFIC SYSTEM-CAPABILITY.	1--CONFIRMED; 2--PROBABLE; 3--POSSIBLE; 4--DOUBTFUL; 5--IMPROBABLE; 6--TRUTH CANNOT BE JUDGED

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
SYSTEM-CAPABILITY	SYSTEM-CAPABILITY Identifier	SYSC_id	Id(int)	int	NOT NULL	Yes	No	The unique identifier of a specific SYSTEM-CAPABILITY for a specific SYSTEM and a specific CAPABILITY.	
SYSTEM-CAPABILITY	SYSTEM-CAPABILITY Measurement Unit Quantity	SYSC_meas_un_qty	Number, Real	float	NULL	No	No	The number of a specific CAPABILITY that applies to a specific SYSTEM in a SYSTEM-CAPABILITY.	
SYSTEM-CAPABILITY	SYSTEM-CAPABILITY Type Code	SYSC_ty_cd	Code, smallint	smallint	NULL	No	No	The code that designates a specific class of SYSTEM-CAPABILITY.	1--Proposed; 2--Planned; 3--Under development; 4--Under test; 5--Operational; 6--Other; 8 = Not Specified; 9 = Not known.
SYSTEM-CAPABILITY	SYSTEM-PROCESS-ACTIVITY Identifier	SPA_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific PROCESS-ACTIVITY-SYSTEM for a specific PROCESS-ACTIVITY and a specific SYSTEM.	
SYSTEM-EQUIPMENT-TYPE	SYSTEM-Equipment Type MATERIEL-ITEM Identifier	MATL_id	Id(int)	int	NOT NULL	Yes	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	
SYSTEM-EQUIPMENT-TYPE	SYSTEM Identifier	SYS_id	Id(int)	int	NOT NULL	Yes	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
SYSTEM-EQUIPMENT-TYPE	SYSTEM-EQUIPMENT-TYPE Identifier	SYS_EQT_id	Id(int)	int	NOT NULL	Yes	No	The identifier for a specific SYSTEM-EQUIPMENT-TYPE for a specific SYSTEM and a specific EQUIPMENT-TYPE.	
SYSTEM-EQUIPMENT-TYPE	SYSTEM-EQUIPMENT-TYPE Quantity	SYS_EQT_qty	Number	int	NULL	No	No	The number of a specific EQUIPMENT-TYPE that occurs for a specific SYSTEM.	ASA unit: EACH (number of the EQUIPMENT-TYPE).
SYSTEM-EQUIPMENT-TYPE	SYSTEM-EQUIPMENT-TYPE Role Code	SYS_EQT_role_cd	Code, smallint	smallint	NULL	No	No	The code that designates the specific way in which an EQUIPMENT-TYPE is cited for a SYSTEM	1--Uses as a workstation; 2--Uses as a server; 3--Uses as a peripheral display; 4--Is procured as; 5--Is a central processing unit for; 6--Is an interface device for; 7--Is a communications device for; 8--Is a security device for; 98--Not specified; 99--Not known.
SYSTEM-FUNCTION	FUNCTIONAL-AREA IDENTIFIER	FUNCAR_id	Id(int)	int	NULL	No	Yes	(20492) (A) THE IDENTIFIER THAT REPRESENTS A FUNCTIONAL-AREA.	
SYSTEM-FUNCTION	System Function PROCESS-ACTIVITY Identifier	PA_id	Id(int)	int	NOT NULL	Yes	Yes	(29165/2) (A) THE IDENTIFIER THAT REPRESENTS A PROCESS-ACTIVITY.	
SYSTEM-FUNCTION	SYSTEM-FUNCTION Description Text {JCAPS}	SYSFUNC_desc_text	String	varchar(2000)	NULL	No	No	THE TEXT THAT DESCRIBES A FUNCTION.	Source: JCAPS 2.1 (FUNC_D_TXT).
SYSTEM-FUNCTION	SYSTEM-FUNCTION Type Code {JCAPS}	SYSFUNC_ty_cd	Code, smallint	smallint	NULL	No	No	THE CODE THAT DENOTES A KIND OF FUNCTION.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (FUNC_TY_CD).

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
SYSTEM-INTERFACE-DESCRIPTION {SV-1}	DOCUMENT IDENTIFIER	DOC_ID	Id(int)	int	NOT NULL	Yes	Yes	(9643/2) (A) THE IDENTIFIER THAT REPRESENTS A DOCUMENT.	
SYSTEM-INTERFACE-DESCRIPTION-ELEMENT	DOCUMENT IDENTIFIER	DOC_ID	Id(int)	int	NOT NULL	Yes	Yes	(9643/2) (A) THE IDENTIFIER THAT REPRESENTS A DOCUMENT.	
SYSTEM-INTERFACE-DESCRIPTION-ELEMENT	Ordinate SYSTEM Identifier	Ord_SYS_id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
SYSTEM-INTERFACE-DESCRIPTION-ELEMENT	Subordinate SYSTEM Identifier	Sub_SYS_id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
SYSTEM-INTERFACE-DESCRIPTION-ELEMENT	SYSTEM-ASSOCIATION IDENTIFIER	SYSA_id	Id(int)	int	NULL	No	Yes	THE IDENTIFIER THAT REPRESENTS A SYSTEM-ASSOCIATION.	
SYSTEM-INTERFACE-DESCRIPTION-ELEMENT	SYSTEM-ASSOCIATION-MEANS Identifier	SYSAME_id	Id(int)	int	NULL	No	Yes	The identifier of a SYSTEM-ASSOCIATION-MEANS for a specific SYSTEM-ASSOCIATION.	
SYSTEM-INTERFACE-DESCRIPTION-ELEMENT	SYSTEM-INTERFACE-DESCRIPTION-ELEMENT Identifier	SYS_IFD_E_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a SYSTEM-INTERFACE-DESCRIPTION-ELEMENT for a specific SYSTEM-INTERFACE-DESCRIPTION.	
SYSTEM-INTERFACE-TYPE {JCAPS}	INTERFACE-TYPE Identifier {JCAPS}	INTF_TY_id	Id(int)	int	NOT NULL	Yes	Yes	THE IDENTIFIER THAT REPRESENTS A GENERIC TYPE OF INTERFACE	Source: JCAPS 2.1 (INTF_TY_ID).
SYSTEM-INTERFACE-TYPE {JCAPS}	SYSTEM Identifier	SYS_id	Id(int)	int	NOT NULL	Yes	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
SYSTEM-INTERFACE-TYPE {JCAPS}	SYSTEM-INTERFACE-TYPE Identifier {JCAPS}	SYS_INT_F_TY_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a SYSTEM-INTERFACE-TYPE for a specific SYSTEM and a specific INTERFACE-TYPE.	Source: JCAPS 2.1 (SY_TY_INTF_TY_ID).
SYSTEM-ORGANIZATION	ORGANIZATION IDENTIFIER	ORG_id	Id(int)	int	NOT NULL	Yes	Yes	(7875/1) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION.	
SYSTEM-ORGANIZATION	POINT-OF-CONTACT Identifier	POC_id	Id(int)	int	NULL	No	Yes	The unique identifier of a specific POINT-OF-CONTACT.	
SYSTEM-ORGANIZATION	SYSTEM Identifier	SYS_id	Id(int)	int	NOT NULL	Yes	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
SYSTEM-ORGANIZATION	SYSTEM-ORGANIZATION Identifier	SYS_ORG_id	Id(int)	int	NOT NULL	Yes	No	The unique identifier of a specific SYSTEM-ORGANIZATION for a specific SYSTEM and a specific ORGANIZATION.	
SYSTEM-ORGANIZATION	SYSTEM-ORGANIZATION Role Code	SYS_ORG_role_cd	Code_smallint	smallint	NULL	No	No	The code that designates the way a specific ORGANIZATION is related to a specific ORGANIZATION in a SYSTEM-ORGANIZATION.	1 = Is operated by; 2 = Is installed by; 3 = Is managed by; 4 = Is maintained by; 5 = Is developed by; 6 = Is owned by; 7 = Is supplied by; 8 = Has the office of primary responsibility for; 98 = Not specified; 99 = Not known.
SYSTEM-ORGANIZATION	SYSTEM-ORGANIZATION Role Effective Date	SYS_ORG_role_eff_dt	Date	datetime	NULL	No	No	The date of the initiation of the validity of a specific SYSTEM-ORGANIZATION related in a designated role.	
SYSTEM-SECURITY-CLASSIFICATION	SYSTEM-SECURITY-CLASSIFICATION IDENTIFIER	CSC_ID	Id(int)	int	NOT NULL	Yes	Yes	(16225/1) (A) THE IDENTIFIER OF A CAVEATED-SECURITY-CLASSIFICATION. NOTE: BLOCKS OF IDENTIFIERS WILL BE ALLOCATED TO DEFENSE ORGANIZATIONS. IT WILL BE UP TO EACH DEFENSE ORGANIZATION TO ALLOCATE AND CONFIGURATION MANAGE ITS OWN IDENTIFIERS.	
SYSTEM-SECURITY-CLASSIFICATION	SYSTEM-SECURITY-CLASSIFICATION CODE	SC_cd	Code_smallint	smallint	NOT NULL	Yes	Yes	(26900/3) (A) THE CODE THAT REPRESENTS A SECURITY-CLASSIFICATION. (DDDS, 10 August 2000) 01 = CONFIDENTIAL; 02 = CONFIDENTIAL RESTRICTED; 03 = FOR OFFICIAL USE ONLY; 04 = NATO CONFIDENTIAL; 05 = NATO CONFIDENTIAL ATOMAL; 06 = NATO RESTRICTED; 07 = NATO SECRET; 08 = NATO SECRET ATOMAL; 09 = NATO TOP SECRET; 10 = NATO TOP SECRET ATOMAL; 11 = SECRET; 12 = SECRET RESTRICTED; 13 = TOP SECRET; 14 = UNCLASSIFIED; 15 = UNCLASSIFIED SENSITIVE; 98 = NOT SPECIFIED; 99 = NOT KNOWN (DDDS, 10 August 2000)	
SYSTEM-SECURITY-CLASSIFICATION	SYSTEM Identifier	SYS_id	Id(int)	int	NOT NULL	Yes	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
SYSTEM-SECURITY-CLASSIFICATION	SYSTEM-SECURITY-CLASSIFICATION Accreditation Date	SYS_SC_accred_dt	Date	datetime	NULL	No	No	The initial date at which a specific SECURITY-CLASSIFICATION applies to a specific SYSTEM in a SYSTEM-SECURITY-CLASSIFICATION.	
SYSTEM-SECURITY-CLASSIFICATION	SYSTEM-SECURITY-CLASSIFICATION DESCRIPTION TEXT	SYS_SC_desc_text	String	varchar(8000)	NULL	No	No	THE TEXT THAT DESCRIBES A SYSTEM-SECURITY-CLASSIFICATION.	
SYSTEM-SECURITY-CLASSIFICATION	SYSTEM-SECURITY-CLASSIFICATION IDENTIFIER	SYS_SC_id	Id(int)	int	NOT NULL	Yes	No	THE IDENTIFIER THAT REPRESENTS A SYSTEM-SECURITY-CLASSIFICATION.	
SYSTEM-SOFTWARE-ITEM	Software Item MATERIEL-ITEM Identifier	MATI_id	Id(int)	int	NOT NULL	Yes	Yes	(10902) (A) THE IDENTIFIER THAT REPRESENTS A MATERIEL-ITEM.	
SYSTEM-SOFTWARE-ITEM	SYSTEM Identifier	SYS_id	Id(int)	int	NOT NULL	Yes	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
SYSTEM-MATRIX {SV-3}	DOCUMENT IDENTIFIER	DOC_ID	Id(int)	int	NOT NULL	Yes	Yes	(9643/2) (A) THE IDENTIFIER THAT REPRESENTS A DOCUMENT.	
SYSTEM-MATRIX-ELEMENT	DOCUMENT IDENTIFIER	DOC_ID	Id(int)	int	NOT NULL	Yes	Yes	(9643/2) (A) THE IDENTIFIER THAT REPRESENTS A DOCUMENT.	
SYSTEM-MATRIX-ELEMENT	PERIOD IDENTIFIER	PERIOD_id	Id(int)	int	NULL	No	Yes	(12180) (A) THE IDENTIFIER THAT REPRESENTS A PERIOD.	
SYSTEM-MATRIX-ELEMENT	SYSTEM-ASSOCIATION-MEANS Group Identifier	SYS_id	Id(int)	int	NULL	No	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
SYSTEM-MATRIX-ELEMENT	SYSTEM-ASSOCIATION-MEANS Group Identifier	SYS_SM_E_descr_tx	String	varchar(8000)	NULL	No	No	The text that summarizes a specific SYSTEM-SYSTEM-MATRIX-ELEMENT.	
SYSTEM-MATRIX-ELEMENT	SYSTEM-ASSOCIATION-MEANS Group Identifier	SYS_SM_E_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a SYSTEM-SYSTEM-MATRIX-ELEMENT for a specific SYSTEM-SYSTEM-MATRIX.	
SYSTEM-MATRIX-ELEMENT	SYSTEM-ASSOCIATION-MEANS Group Identifier	SYS_SM_E_tmfr_ly_cd	Code_smallint	smallint	NULL	No	No	The code that denotes the class of time frame addressed by a specific SYSTEM-SYSTEM-MATRIX-ELEMENT.	1 = As is; 2 = To be; 8 = Not specified; 9 = Not known.
SYSTEM-TRANSMISSION {JCAPS}	SYSTEM-TRANSMISSION Antenna Type Name {JCAPS}	SYS_id	Id(int)	int	NOT NULL	Yes	Yes	(33206/1) (D) THE IDENTIFIER THAT REPRESENTS A SYSTEM. (DDDS, June 1998) From CADM 1.0: The unique identifier of a specific SYSTEM.	
SYSTEM-TRANSMISSION {JCAPS}	SYSTEM-TRANSMISSION Channel Quantity {JCAPS}	STR_ant_n_ty_nm	String	varchar(50)	NULL	No	No	The name of the class of antenna primary used by a specific SYSTEM for data communications.	Source: JCAPS 2.1 (ANTN_TY_NM).
SYSTEM-TRANSMISSION {JCAPS}	SYSTEM-TRANSMISSION Communication Mode Code {JCAPS}	STR_chn_l_qy	Number	float	NULL	No	No	The number of channels used by a specific SYSTEM for data communications.	Source: JCAPS 2.1 (NUM_CHANNELS).
SYSTEM-TRANSMISSION {JCAPS}	SYSTEM-TRANSMISSION Communication Mode Code {JCAPS}	STR_comm_mod_e_cd	Code_smallint	smallint	NULL	No	No	The code that represents the class of data communications used by a specific SYSTEM.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (COMM_MODE).

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null	PK	FK	Attribute Definition	Attribute Domain Note
SYSTEM-TRANSMISSION {JCAPS}	SYSTEM-TRANSMISSION Data Rate {JCAPS}	STR_data_rt	Number	float	NULL	No	No	The most common rate at which the information content in a specific SYSTEM is conveyed in data communications.	Unit is bits per second. Source: JCAPS 2.1 (DATA_RATE).
SYSTEM-TRANSMISSION {JCAPS}	SYSTEM-TRANSMISSION Overhead Rate {JCAPS}	STR_ovhd_rt	Number	float	NULL	No	No	The most common rate at which security, error checking, error correction, and other non-information-content data is conveyed in data communications for a specific SYSTEM.	Unit is TBD from JCAPS. Source: JCAPS 2.1 (OH_RATE).
SYSTEM-TRANSMISSION {JCAPS}	SYSTEM-TRANSMISSION Receive Frequency Maximum Display Unit Code {JCAPS}	STR_rx_freq_hun_cd	Code_smallint	smallint	NULL	No	No	The code that represents the units of measure adopted for user displays of the highest frequency that is employed for incoming traffic in data communications for a specific SYSTEM.	1 = Hz; 2 = kHz; 3 = MHz; 4 = GHz; 8 = Not specified; 9 = Not known. Domain detail is TBD from JCAPS. Source: JCAPS 2.1 (RX_FREQ_HIGH_DISP_UNITS).
SYSTEM-TRANSMISSION {JCAPS}	SYSTEM-TRANSMISSION Receive Frequency Maximum Rate {JCAPS}	STR_rx_freq_h_rt	Number	float	NULL	No	No	The highest frequency that is used for incoming traffic in data communications for a specific NODE-SYSTEM.	Unit is Hz. Source: JCAPS 2.1 (RX_FREQ_HIGH_HZ).
SYSTEM-TRANSMISSION {JCAPS}	SYSTEM-TRANSMISSION Receive Frequency Minimum Display Unit Code {JCAPS}	STR_rx_freq_min_hun_cd	Code_smallint	smallint	NULL	No	No	The code that represents the units of measure adopted for user displays of the lowest frequency that is employed for incoming traffic in data communications for a specific SYSTEM.	1 = Hz; 2 = kHz; 3 = MHz; 4 = GHz; 8 = Not specified; 9 = Not known. Domain detail is TBD from JCAPS. Source: JCAPS 2.1 (RX_FREQ_LOW_DISP_UNITS).
SYSTEM-TRANSMISSION {JCAPS}	SYSTEM-TRANSMISSION Receive Frequency Minimum Rate {JCAPS}	STR_rx_freq_min_rt	Number	float	NULL	No	No	The lowest frequency that is used for incoming traffic in data communications for a specific NODE-SYSTEM.	Unit is Hz. Source: JCAPS 2.1 (RX_FREQ_LOW_HZ).
SYSTEM-TRANSMISSION {JCAPS}	SYSTEM-TRANSMISSION Transmit Frequency Maximum Display Unit Code {JCAPS}	STR_tx_freq_hun_cd	Code_smallint	smallint	NULL	No	No	The code that represents the units of measure adopted for user displays of the highest frequency that is employed for outgoing traffic in data communications for a specific SYSTEM.	1 = Hz; 2 = kHz; 3 = MHz; 4 = GHz; 8 = Not specified; 9 = Not known. Domain detail is TBD from JCAPS. Source: JCAPS 2.1 (TX_FREQ_HIGH_DISP_UNITS).
SYSTEM-TRANSMISSION {JCAPS}	SYSTEM-TRANSMISSION Transmit Frequency Maximum Rate {JCAPS}	STR_tx_freq_h_rt	Number	float	NULL	No	No	The highest frequency that is used for outgoing traffic in data communications for a specific NODE-SYSTEM.	Unit is Hz. Source: JCAPS 2.1 (TX_FREQ_HIGH_HZ).

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain
SYSTEM-TRANSMISSION {JCAPS}	SYSTEM-TRANSMISSION Transmit Frequency Minimum Display Unit Code {JCAPS}	STR_tx_freq_unit_cd	Code_smallint	smallint	NULL	No	No	The code that represents the units of measure adopted for user displays of the lowest frequency that is employed for outgoing traffic in data communications for a specific SYSTEM.	1 = Hz; 2 = kHz; 3 = mHz; 4 = GHz; 8 = Not specified; 9 = Not known. Domain detail is TBD from JCAPS. Source: JCAPS 2.1 (TX_FREQ_LOW_DISP_UNITS).
SYSTEM-TRANSMISSION {JCAPS}	SYSTEM-TRANSMISSION Transmit Frequency Minimum Rate {JCAPS}	STR_tx_freq_min_rate	Number	float	NULL	No	No	The lowest frequency that is used for outgoing traffic in data communications for a specific NODE-SYSTEM.	Unit is Hz. Source: JCAPS 2.1 (TX_FREQ_LOW_HZ).
SYSTEM-TYPE	SYSTEM-TYPE Description Text {JCAPS}	SYS_TY_desc_text	Text(255)	varchar(255)	NULL	No	No	The text that summarizes a SYSTEM-TYPE. Compare (DDDS, June 1998): SYSTEM-TYPE DESCRIPTION TEXT--(33304/1) (D) THE TEXT THAT DESCRIBES A SYSTEM TYPE.	
SYSTEM-TYPE	SYSTEM-TYPE Identifier	SYS_TY_id	Id(int)	int	NOT NULL	Yes	No	A class of SYSTEM. Compare (DDDS, June 1998): SYSTEM-TYPE CODE--(33216/1) (D) THE CODE THAT REPRESENTS A SYSTEM-TYPE, whose domain values are not yet recorded in the DDDS.	
SYSTEM-TYPE	SYSTEM-TYPE Name	SYS_TY_nm	Name	varchar(50)	NULL	No	No	Examples: Aircraft, Ship, Land Vehicle, Collection System, Command and Control Information System, Intelligence Collection System, Intelligence System, Hardware-Software System, and Telecommunications System.	
SYSTEM-TYPE-ASSOCIATION {JCAPS}	Child SYSTEM-TYPE Identifier	Chl_SYS_TY_id	Id(int)	int	NOT NULL	Yes	Yes	A class of SYSTEM. Compare (DDDS, June 1998): SYSTEM-TYPE CODE--(33216/1) (D) THE CODE THAT REPRESENTS A SYSTEM-TYPE, whose domain values are not yet recorded in the DDDS.	
SYSTEM-TYPE-ASSOCIATION {JCAPS}	Parent SYSTEM-TYPE Identifier	Par_SYS_TY_id	Id(int)	int	NOT NULL	Yes	Yes	A class of SYSTEM. Compare (DDDS, June 1998): SYSTEM-TYPE CODE--(33216/1) (D) THE CODE THAT REPRESENTS A SYSTEM-TYPE, whose domain values are not yet recorded in the DDDS.	
SYSTEM-TYPE-ASSOCIATION {JCAPS}	SYSTEM-TYPE-ASSOCIATION Identifier {JCAPS}	SYSTA_id	Id(int)	int	NOT NULL	Yes	No	The identifier of a SYSTEM-TYPE-ASSOCIATION for a specific Parent SYSTEM-TYPE and a specific Child SYSTEM-TYPE.	Source: JCAPS 2.1 (based on SYS_CAT_ID).
SYSTEM-TYPE-ASSOCIATION {JCAPS}	SYSTEM-TYPE-ASSOCIATION Role Code {JCAPS}	SYSTA_role_cd	Code_smallint	smallint	NULL	No	No	The code that represents the way in which the Parent SYSTEM-TYPE is related to the Child SYSTEM-TYPE.	1 = is a superclass for; 2 = is equivalent to; 8 = Not specified; 9 = Not known. Source: JCAPS 2.1 (based on SYS_CAT_PARENT_ID, SYS_CAT_D_TXT).
TASK	TASK Category Code	TSK_cat_cd	Code_smallint	smallint	NULL	No	No	The code that designates class of TASK which may be used as a category discriminator to divide TASK into disjoint subsets. Compare (DDDS, June 1998): TASK-TYPE CATEGORY CODE--(16820/3) (A) THE CODE THAT REPRESENTS A CLASSIFICATION OF A TASK-TYPE, whose domain values are: A-ADMINISTRATIVE; B-DIVING; C-FLYING; D-MAINTENANCE; E-RECRUITING; F-RESEARCH; G-TRAINING; H-SUPERVISORY; I-TEACHING; J-DATA PROCESSING; K-INTELLIGENCE; L-ACQUISITION; M-PAYMENT; N-PRODUCTION; O-PROPERTY MANAGEMENT; P-QUALITY ASSURANCE; Q-TRANSPORTATION (R-ENGINEERING has been proposed).	1--Mission Essential Task; 8--Not specified; 9--Not known. Added for Army Integrated Data Model (IER Workshop at IDA, 5 January 2000); 2--Universal Joint Task; 3--Extension to Universal Joint Task.

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
TASK	TASK Command Level Code	TSK_cm_d_lv_cd	String	varchar(4)	NULL	No	No	The code that represents the general scope of military operation for a TASK.	SN--Strategic National; ST--Strategic Theater; OP--Operational; TA--Tactical (CJCSI 6111.01, 19 Nov 96). Added for CADM 2.0: N--Not specified; X--Not known. Added for Army Integrated Architecture Data Model: ART--Army Tactical; NTA--Naval Tactical; AFT--Air Force Tactical.
TASK	TASK DESCRIPTION TEXT	TSK_des_cr_tx	Text(8000)	varchar(8000)	NULL	No	No	(25321) (A) THE TEXT OF AN EXPLANATION OF A TASK.	
TASK	TASK Effective Calendar Date	TSK_eff_caldt	Date	datetime	NULL	No	No	The calendar date upon which the TASK becomes effective.	
TASK	TASK Hierarchy Number Identifier	TSK_hier_arch_no_id	String	varchar(255)	NULL	No	No	The unique identifier for a TASK that is a restatement of a element of the Universal Joint Task List.	Formerly named TASK Joint Task Identifier (CADM 1.0 and CADM 2.0). All tasks have a hierarchy number, not just UJTLs.
TASK	TASK Hierarchy Sequence Code {JCAPS}	TSK_hier_arch_seq_cd	Code-smallint	smallint	NULL	No	No	The code that denotes the order of TASKs with the same Hierarchy Number Identifier.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (UJTL_TASK_HIER_SEQ_CD).
TASK	TASK IDENTIFIER	TSK_id	Id(int)	int	NOT NULL	Yes	No	(9282) (A) THE IDENTIFIER THAT REPRESENTS A TASK.	
TASK	TASK NAME	TSK_nm	String	varchar(40)	NULL	No	No	(16816) (A) THE NAME OF A TASK.	
TASK	TASK Note Text {JCAPS}	TSK_note_tx	String	varchar(2000)	NULL	No	No	THE TEXT THAT IS A NOTE FOR A SPECIFIC UNIVERSAL-JOINT-TASK-LIST TASK.	Source: JCAPS 2.1 (UJTL_TASK_NOTE_TX).
TASK	TASK Reference Source Text {JCAPS}	TSK_ref_src_tx	String	varchar(100)	NULL	No	No	THE SOURCE OF A REFERENCE FOR A SPECIFIC TASK IN THE UNIVERSAL-JOINT-TASK-LIST.	Source: JCAPS 2.1 (UJTL_TASK_REF_TX).
TASK	TASK Version Identifier {JCAPS}	TSK_ver_s_id	String	varchar(20)	NULL	No	No	THE IDENTIFIER THAT REPRESENTS A SPECIFIC VERSION OF A UNIVERSAL-JOINT-TASK-LIST-TASK.	Source: JCAPS 2.1 (UJTL_TASK_REF_TX).
TASK-ASSOCIATION	ORDINATE TASK IDENTIFIER	Ord_TSK_id	Id(int)	int	NOT NULL	Yes	Yes	(9282) (A) THE IDENTIFIER THAT REPRESENTS A TASK.	
TASK-ASSOCIATION	SUBORDINATE TASK IDENTIFIER	Sub_TS_K_id	Id(int)	int	NOT NULL	Yes	Yes	(9282) (A) THE IDENTIFIER THAT REPRESENTS A TASK.	
TASK-ASSOCIATION	TASK-ASSOCIATION BEGIN DATE	TSKA_bgn_dt	Date	datetime	NOT NULL	Yes	No	(16817) (A) THE DATE WHEN AN ASSOCIATION BETWEEN A TASK AND ANOTHER TASK STARTS.	8-character (max) string in the range 17760101 to 99991231
TASK-ASSOCIATION	TASK-ASSOCIATION END DATE	TSKA_end_dt	Date	datetime	NULL	No	No	(16818) (A) THE DATE WHEN AN ASSOCIATION BETWEEN A TASK AND ANOTHER TASK STOPS.	8-character (max) string in the range 17760101 to 99991231
TASK-ASSOCIATION	TASK-ASSOCIATION REASON CODE	TSKA_reason_cd	Code-smallint	smallint	NULL	No	No	(16819/2) (A) THE CODE THAT REPRESENTS THE UNDERLYING BASIS OF A TASK-ASSOCIATION.	A--TASK ENTAILS SUPERVISION OF OTHER TASK; B--TASK IS COMPONENT OF OTHER TASK; C--TASK PRECEDES OTHER TASK; D--TASK REQUIRES COMPLETION OF OTHER TASK. [1-character (max) string]

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Entity Name	Attribute Name	Col. Name	Do- main	Data- type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
TASK-MISSION- AREA	MISSION-AREA TYPE CODE	MA_ty_c d	Code_ small int	smallint	NOT NULL	Yes	Yes	(16078) (A) THE CODE THAT DENOTES A CLASS OF MISSION-AREA.	01--MOBILIZATION; 02--INTELLIGENCE; 03--EMPLOYMENT; 04-- SEARCH AND RESCUE; 05--CONSTRUCTION; 06--AMPHIBIOUS WARFARE; 07--ANTI-AIR WARFARE; 08--SPECIAL OPERATIONS; 09--PSYCHOLOGICAL OPERATIONS; 10--CIVIL AFFAIRS. Additions from Naval Architecture Database: 11--AMPH--Amphibious Warfare; 12--STRK--Strike Warfare; 13--UNSW--Undersea Warfare; 14--MINE-- Mining Warfare; 15--TAD--Theater Air Defense; 16--ISR--Intelligence Surveillance & Reconnaissance; 17--AIR--Air Warfare; 18--SURF-- Surface Warfare. - Other additions: 19--C2--Command and Control; 20--FS--Fire Support; 21--IW--Information Warfare; 22--LOG--Logistics; 23--MAR--Maritime (General); 24--MVR--Maneuver and Land Warfare; 25--C2W--Command and Control Warfare; 26--OCA--Offensive Counter Air; 27--DCA--Defense Counter Air; 28--AIRC--Airspace Control; 29--INT--interdiction; 30--EW--Electronic Warfare.
TASK-MISSION- AREA	TASK IDENTIFIER	TSK_id	Id(int)	int	NOT NULL	Yes	Yes	(9282) (A) THE IDENTIFIER THAT REPRESENTS A TASK.	
TASK-MISSION- AREA	TASK-MISSION- AREA Description Text {JCAPS}	TSKMA_ descr_tx	String	varchar(2 000)	NULL	No	No	THE TEXT THAT DESCRIBES A MISSION- AREA-TASK.	Source: JCAPS 2.1 (TASK_MSN_AR_DTX).
TECHNICAL- ARCHITECTURE	ARCHITECTURE Identifier	ARCH_id	Id(int)	int	NOT NULL	Yes	Yes	The identifier of a specific ARCHITECTURE.	
TECHNICAL- ARCHITECTURE	TECHNICAL- ARCHITECTURE Type Code	TECHAR_ ty_cd	Code_ small int	smallint	NULL	No	No	The code that designates the class of TECHNICAL- ARCHITECTURE.	1--Enterprise; 2--Functional Domain; 8 = Not Specified; 9 = Not known.
USER-DEFINED- PROPERTY {JCAPS}	ARCHITECTURE Identifier	ARCH_id	Id(int)	int	NOT NULL	Yes	Yes	The identifier of a specific ARCHITECTURE.	
USER-DEFINED- PROPERTY {JCAPS}	OBJECT_ID {JCAPS}	OBJECT_ _ID	Id(int)	int	NOT NULL	Yes	No	Definition is TBD from JCAPS.	Source: JCAPS 2.1 (OBJECT_ID).
USER-DEFINED- PROPERTY {JCAPS}	PROPERTY_ID {JCAPS}	PROP_J D	Id(int)	int	NOT NULL	Yes	Yes	Definition is TBD from JCAPS.	Source: JCAPS 2.1 (PROPERTY_ID).
USER-DEFINED- PROPERTY {JCAPS}	USER-DEFINED- PROPERTY Value Text {JCAPS}	PROPER TY_VAL UE	String	varchar(2 55)	NULL	No	No	Definition is TBD from JCAPS.	Source: JCAPS 2.1 (PROPERTY_VALUE).
USER-DEFINED- PROPERTY- DICTIONARY {JCAPS}	PARENT_PROPE RTY_ID {JCAPS}	PAR_PR OP_ID	Id(int)	int	NULL	No	No	Definition is TBD from JCAPS.	Source: JCAPS 2.1 (PARENT_PROPERTY_ID).
USER-DEFINED- PROPERTY- DICTIONARY {JCAPS}	PROPERTY DIS PLAY_ORDER {JCAPS}	PROP_D ISP_OR DR	Numb er	float	NULL	No	No	Definition is TBD from JCAPS.	Source: JCAPS 2.1 (PROPERTY_DISPLAY_ORDER).

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Entity Name	Attribute Name	Col. Name	Do-main	Data-type	Null Opt.	PK	FK	Attribute Definition	Attribute Domain Note
USER-DEFINED-PROPERTY-DICTIONARY {JCAPS}	PROPERTY_ENUM_ALLOW_NEW {JCAPS}	PROPERTY_ENUM_ALLOW_NEW	String	varchar(10)	NULL	No	No	Definition is TBD from JCAPS.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (PROPERTY_ENUM_ALLOW_NEW).
USER-DEFINED-PROPERTY-DICTIONARY {JCAPS}	PROPERTY_ID {JCAPS}	PROPERTY_ID	Id(int)	int	NOT NULL	Yes	No	Definition is TBD from JCAPS.	Source: JCAPS 2.1 (PROPERTY_ID).
USER-DEFINED-PROPERTY-DICTIONARY {JCAPS}	PROPERTY_NAME {JCAPS}	PROPERTY_NAME	String	varchar(50)	NULL	No	No	Definition is TBD from JCAPS.	Source: JCAPS 2.1 (PROPERTY_NAME).
USER-DEFINED-PROPERTY-DICTIONARY {JCAPS}	PROPERTY_OBJECT_TYPE_PROGID {JCAPS}	PROPERTY_OBJECT_TYPE_PROGID	Id(int)	int	NULL	No	No	Definition is TBD from JCAPS.	Source: JCAPS 2.1 (PROPERTY_OBJECT_TYPE_PROGID).
USER-DEFINED-PROPERTY-DICTIONARY {JCAPS}	PROPERTY_TYPE {JCAPS}	PROPERTY_TYPE	Number	float	NULL	No	No	Definition is TBD from JCAPS.	Source: JCAPS 2.1 (PROPERTY_TYPE).
USER-DEFINED-PROPERTY-DICTIONARY {JCAPS}	PROPERTY_VISIBLE {JCAPS}	PROPERTY_VISIBLE	String	varchar(10)	NULL	No	No	Definition is TBD from JCAPS.	Domain is TBD from JCAPS. Source: JCAPS 2.1 (PROPERTY_VISIBLE).
USER-DEFINED-PROPERTY-DICTIONARY-ENUMERATION {JCAPS}	PROPERTY_ID {JCAPS}	PROPERTY_ID	Id(int)	int	NOT NULL	Yes	Yes	Definition is TBD from JCAPS.	Source: JCAPS 2.1 (PROPERTY_ID).
USER-DEFINED-PROPERTY-DICTIONARY-ENUMERATION {JCAPS}	USER-DEFINED-PROPERTY-DICTIONARY-ENUMERATION Value Text {JCAPS}	ENUM_VALUE	String	varchar(50)	NOT NULL	Yes	No	Definition is TBD from JCAPS.	Source: JCAPS 2.1 (ENUM_VALUE).

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UNCLASSIFIED

ANNEX N. REFERENCES

- [AAP-6 ND] *NATO Glossary of Terms and Definitions*, AAP-6, Undated, NATO UNCLASSIFIED.
- [ADPM 2000] *Architecture Development Process Model (ADPM)*, CD ROM Version 1.0, Department of the Navy Chief Information Officer, 24 April 2000, UNCLASSIFIED.
- [AOA 1997] *Army Operational Architecture, High-Level Information Needs Study Activity Models, Speculative View 1*, Version 1.0, Prepared by A.S.E. Consulting for TRADOC C4 Directorate and TPIO, 16 June 1997, UNCLASSIFIED.
- [AR 25-1 1991] AR 25-1, *The Army Information Resource Management Program*, Headquarters, Department of the Army, 24 May 1991, UNCLASSIFIED.
- [AR 25-1 1998] AR 25-1, *The Army Information Resource Management Program*, Draft, Headquarters, Department of the Army, 25 May 1998, UNCLASSIFIED.
- [ARCADM 1999a] *Army Core Architecture Data Model (ARCADM)*, Draft, Institute for Defense Analyses for U.S. Army ODISC4, 24 August 1999 [arcadm24aug.zip], UNCLASSIFIED.
- [ARCADM 1999b] *Army Core Architecture Data Model (ARCADM)*, Draft, Institute for Defense Analyses for U.S. Army ODISC4, 14 September 1999 [arcadm_14Sep99.zip], UNCLASSIFIED.
- [ARCADM 1999c] *Army Core Architecture Data Model (ARCADM)*, Draft, Institute for Defense Analyses for U.S. Army ODISC4, 22 September 1999 [arcadm_22Sep.zip], UNCLASSIFIED.
- [ARCADM 1999d] *Army Core Architecture Data Model (ARCADM)*, Draft, Institute for Defense Analyses for U.S. Army ODISC4, 21 October 1999 [arcadm_21Oct99.zip], UNCLASSIFIED.
- [ARCADM 1999e] *Army Core Architecture Data Model (ARCADM)*, Draft, Institute for Defense Analyses for U.S. Army ODISC4, 2 November 1999 [asa2nov99.zip], UNCLASSIFIED.
- [ARCADM 2000a] *Army Core Architecture Data Model (ARCADM)*, Draft, Institute for Defense Analyses for U.S. Army ODISC4, 5 January 2000 [arcadm_05Jan00.zip], UNCLASSIFIED.
- [ARCADM 2000b] *Army Core Architecture Data Model (ARCADM)*, Draft, Institute for Defense Analyses for U.S. Army ODISC4, 10 February 2000 [arcadm_10Feb00.zip], UNCLASSIFIED.
- [ARCADM 2000c] *Army Core Architecture Data Model (ARCADM)*, Draft, Institute for Defense Analyses for U.S. Army ODISC4, 8 March 2000 [arcadm_08Mar00.zip], UNCLASSIFIED.

UNCLASSIFIED

- [ARCADM 2000d] *Army Core Architecture Data Model (ARCADM)*, Draft, Institute for Defense Analyses for U.S. Army ODISC4, 19 June 2000 [arcadm_19Jun00e.zip], UNCLASSIFIED.
- [ARCADM 2000e] *Army Core Architecture Data Model (ARCADM)*, Draft, Institute for Defense Analyses for U.S. Army ODISC4, 16 August 2000 [arcadm_16Aug00c.zip], UNCLASSIFIED.
- [ARCADM 2000f] *Army Core Architecture Data Model (ARCADM)*, Draft, Institute for Defense Analyses for U.S. Army ODISC4, 1 September 2000 [arcadm_01Sep00.zip], UNCLASSIFIED.
- [ARCADM 2000g] *Army Core Architecture Data Model (ARCADM)*, Draft, Institute for Defense Analyses for U.S. Army ODISC4, 11 October 2000 [arcadm_11Oct00.zip], UNCLASSIFIED.
- [ARCADM 2000h] *Army Core Architecture Data Model (ARCADM)*, Draft, Institute for Defense Analyses for U.S. Army ODISC4, 31 October 2000 [arcadm_31Oct00.zip], UNCLASSIFIED.
- [ARCADM 2000i] *Army Core Architecture Data Model (ARCADM)*, Draft, Institute for Defense Analyses for U.S. Army ODISC4, 2 November 2000 [arcadm_2Nov00.er1], UNCLASSIFIED.
- [ASADM 1998a] *Draft Revised Army Systems Architecture Data Model (1dfsa_v2_0_c.er1) with Netviz Catalog*, MITRE (Dave Emery) for ODISC4, 15 April 1998, UNCLASSIFIED.
- [ASADM 1998b] *Army Systems Architecture View of CADM Draft 2.0*, Prepared by IDA for ODISC4, Institute for Defense Analyses for CADM-ASA Workshop of 17-19 June 1998, 22 June 1998, UNCLASSIFIED.
- [ASAPS 1999a] *Army Core Architecture Data Model (ARCADM)*, Draft, Institute for Defense Analyses for U.S. Army ODISC4, 23 June 1999 [RevASA_PS_23Jun99.zip], UNCLASSIFIED.
- [ASAPS 1999b] *Army Core Architecture Data Model (ARCADM)*, Draft, Institute for Defense Analyses for U.S. Army ODISC4, 2 September 1999 [RevASA_PS_2Sep99.zip], UNCLASSIFIED.
- [ASAPS 1999c] *Army Core Architecture Data Model (ARCADM)*, Institute for Defense Analyses for U.S. Army ODISC4, Baseline 1.0, 22 September 1999 [RevASA_PS_22Sep99.zip], UNCLASSIFIED.
- [ATCCIS WP24 1990] ATCCIS Phase II Working Paper 25, *Architecture Definition*, ATCCIS Permanent Working Group, Edition 3.0, 21 September 1990, NATO UNCLASSIFIED.
- [ATCCIS WP25 1994] ATCCIS Phase II and Phase III Working Paper 25 and IDA Paper P-2959, *Technical Standards for Command and Control Information Systems*, ATCCIS Permanent Working Group, Edition 4.0, February 1994, NATO UNCLASSIFIED.
- [BAH 2000] Informal Communication on CADM Conformance, Michael J. Murray, Booz-Allen and Hamilton, Incorporated, 20 September 2000, UNCLASSIFIED.
- [Brown 1992] *IDEFIX Formalization*, Robert G. Brown, The Database Design Group, Inc., 15 November 1992 (copyrighted by DDG).

UNCLASSIFIED

- [Bruce 1992a] *Designing Quality Databases with IDEF1X Information Models*, Thomas A. Bruce, Dorset House Publishing, 1992, UNCLASSIFIED.
- [Bruce 1992b] *On IDEF1X--The Why and How of What, A Seminar on Database Quality*, Course Notebook, Short Course by Thomas A. Bruce at the Institute for Defense Analyses, 13-15 October 1992, UNCLASSIFIED.
- [C2 Core 1993] *C2 Core Data Model*, Version 1.0, Defense Information Systems Agency, Joint Interoperability and Engineering Organization, 1 September 1995, UNCLASSIFIED.
- [C2 Core 1994] *C2 Core Data Model*, Version 2.0, Defense Information Systems Agency, Joint Interoperability and Engineering Organization, 1 July 1994, UNCLASSIFIED.
- [C4RDP 1998a] *Army C4RDP Data Model*, Draft Proposal Package, U.S. Army Signal Center, 17 April 1998 (Model dated 4 August 1997), UNCLASSIFIED.
- [C4RDP 1998b] *C4RDP "AS-IS" Activity Model*, TRADOC C4 Directorate and TPIO, 1998, UNCLASSIFIED.
- [CADM 1.0 1997] *C4ISR Core Architecture Data Model (CADM)*, Version 1.0, C4ISR Architecture Working Group, 15 September 1997, UNCLASSIFIED.
- [CADM 2.0 1998] *C4ISR Core Architecture Data Model (CADM) Version 2.0*, IDA Paper P-3423, Institute for Defense Analyses, November 1998, UNCLASSIFIED; published by OASD(C3I) on 1 December 1998 with the same title.
- Volume I—*Executive Summary and Description*
 - Volume II—*Annexes*.
- [CADM Conf. 2000] *CADM Conformance*, Vugraph, Institute for Defense Analyses for ODISC4, 1 May 2000, UNCLASSIFIED.
- [CISA 1996a] *C4ISR Architecture Framework*, Version 1.0, CISA-0000-104-96, C4ISR Integration Task Force, Integrated Architectures Panel, 7 June 1996, UNCLASSIFIED.
- [CISA 1996b] *Integrated Architectures Panel Final Report*, C4ISR Integration Task Force, Integrated Architectures Panel, 3 July 1996, UNCLASSIFIED.
- [CISA 1997a] *The DoD C4ISR Architecture Framework*, Briefing to the Integration Panel of the Architecture Working Group, Jim Bain, Director, CISA Architectures Directorate, 4 August 1997, UNCLASSIFIED.
- [CJCSI 3170.01A 1999] *Requirements Generation System*, Joint Staff J-8, 10 August 1999, UNCLASSIFIED.
- [CJCSI 6111.01 1996] *Command, Control, Communications, and Computer (C4) Systems Planning, Assessments, and Evaluations*, Joint Staff, 19 November 1996, UNCLASSIFIED.
- [CJCSM 3500.04A 1996] *Universal Joint Task List (UJTL)*, Version 3.0, Joint Staff, 13 September 1997, UNCLASSIFIED.
- [CJCSI 6212.01B 1999] *Compatibility, Interoperability, Integration and C4 Supportability Certification of Command, Control, Communications, Computers and Weapon Systems*, Planner Coordination Draft, Revision 2, Joint Staff J-6, 20 October 1999, UNCLASSIFIED.
- [CJCSM 6231.06 1995] *Manual for Employing Joint Tactical Communications, Joint Technical Control Procedures and Systems*, Joint Staff, 14 August 1995, UNCLASSIFIED.

UNCLASSIFIED

- [DART 1997] *Data Analysis and Reconciliation Tool (DART) User's Guide*, CD ROM Version 1.09, GRC International, Incorporated, for CNO N62, April 1997, UNCLASSIFIED.
- [DDDS 1997] Electronic file DDRS.MDB, DISA/JIEO (CD-ROM provides a PCAT-compatible database of extracts from the Defense Data Dictionary System through June 1997), July 1997, UNCLASSIFIED.
- [DDDS 1998] Electronic file DDRS.MDB, DISA/JIEO (CD-ROM provides a PCAT-compatible database of extracts from the Defense Data Dictionary System through 11 October 1998), October 1998, UNCLASSIFIED.
- [DDDS 2000] Electronic file DDDS.MDB, DISA/JIEO (downloadable file from the Defense Data Dictionary System), September 2000, UNCLASSIFIED.
- [DoD 4630.5 1992] DoD Directive 4630.5, *Compatibility, Interoperability, and Integration of Command, Control, Communications, and Intelligence (C3I) Systems*, ASD(C3I), 12 November 1992, UNCLASSIFIED.
- [DoD 4630.8 1992] DoD Instruction 4630.8, *Procedures for Compatibility, Interoperability, and Integration of Command, Control, Communications, and Intelligence (C3I) Systems*, ASD(C3I), 18 November 1992, UNCLASSIFIED.
- [DoD 5000.59-M 1997] DoD Manual 5000.59, *DoD Modeling and Simulation (M&S) Glossary*, Defense Modeling and Simulation Office, December 1997, UNCLASSIFIED.
- [DoD 7920-1 1988] DoD Directive 7920-1, *Life-Cycle Management of Automated Information Systems (AISs)*, ASD(Comptroller), 20 June 1988, UNCLASSIFIED.
- [DoD 8020.1 1992] DoD Instruction 8020.1, *Functional Process Improvement Program*, Draft, OASD(C3I), 1 October 1992, UNCLASSIFIED.
- [DoD 8020.1-M 1992] DoD 8020.1-M, *Functional Process Improvement (Functional Management Process for Implementing the Information Management Program of the Department of Defense)*, Draft, OASD(C3I), August 1992, UNCLASSIFIED.
- [DoD 8120.1 1993] DoD Directive 8120.1, *Life-Cycle Management (LCM) of Automated Information Systems (AISs)*, Deputy Secretary of Defense, 14 January 1993, UNCLASSIFIED [replaces DoD Directive 7920.1].
- [DoD 8120.2 1993] DoD Directive 8120.2, *Automated Information System (AIS) Life-Cycle Management (LCM) Process, Review, and Milestone Approval Procedures*, ASD(C3), 14 January 1993, UNCLASSIFIED [replaces DoD Directive 7920.1].
- [DoD 8320 1995] *DoD Data Administration*, OASD(C3I), UNCLASSIFIED:
- DoD Directive 8320.1, *DoD Data Administration*, 26 September 1991
 - DoD 8320.1-M, *DoD Data Administration Procedures*, March 1994
 - DoD 8320.1-M-1, *DoD Data Element Standardization Procedures*, January 1993 (Revised April 1998)
 - DoD 8320.1-M-2 (Draft), *Database Administration Guidelines*, February 1995.
- [DON-CIO 2000a] *DIAD Data Model*, Department of the Navy Chief Information Officer, 12 October 2000 [000911_DIAD_DESIGN_MODEL.er1], UNCLASSIFIED.
- [DON-CIO 2000b] *DIAD Change Request Forms*, Department of the Navy Chief Information Officer, 12 October 2000 [000816_DIAD_CRF.mdb], UNCLASSIFIED.

UNCLASSIFIED

- [DON-CIO 2000c] *DIAD Rationale for CADM Entity Exclusion*, Department of the Navy Chief Information Officer, 12 October 2000 [Rationale for Exclusion_r1.xls], UNCLASSIFIED.
- [DON-CIO 2000d] Informal Communication on the DIAD, Department of the Navy Chief Information Officer, 1 November 2000, UNCLASSIFIED.
- [FIPS 183 1993] Federal Information Processing Standards (FIPS) Publication 183, *Integration Definition for Function Modeling (IDEF0)*, 21 December 1993.
- [FIPS 184 1993] Federal Information Processing Standards (FIPS) Publication 184, *Integration Definition for Data Modeling (IDEF1X)*, 21 December 1993.
- [Framework 1997a] *C4ISR Architecture Framework*, Version 2.0, AWG Coordination Draft, Framework Panel, Architecture Working Group, 17 September 1997, UNCLASSIFIED (comments due to Framework Panel by 17 October 1997).
- [Framework 1997b] *C4ISR Architecture Framework Version 2.0*, C4ISR Architecture Working Group, 18 December 1997, UNCLASSIFIED.
- [Framework 1998] *Strategic Direction for a DoD Architecture Framework*, Memorandum for Secretaries of the Military Departments, et al., Undersecretary of Defense (Acquisition and Technology), Acting Assistant Secretary of Defense (C3I), and Director for C4 Systems, The Joint Staff, 23 February 1998, UNCLASSIFIED.
- [GH3 1997] *Generic Hub 3 Battlefield Data Model*, Version 2.0, Army Tactical Command and Control System (ATCCIS) Permanent Working Group, September 1997, NATO UNCLASSIFIED.
- [IEEE 610.12 1990] IEEE Std 610-12, *IEEE Standard Glossary of Software Engineering Terminology*, The Institute of Electrical and Electronics Engineers, Inc., New York, 1992.
- [IEEE 1209 1992] IEEE Std 1209-1992, *IEEE Recommended Practice for the Evaluation and Selection of CASE Tools*, The Institute of Electrical and Electronics Engineers, Inc., New York, 1992.
- [IEEE 1348 1995] IEEE Std 1348-1995, *IEEE Recommended Practice for the Adoption of Computer-Aided Software Engineering (CASE) Tools*, ISBN 1-55937-591-4, The Institute of Electrical and Electronics Engineers, Inc., New York, 12 December 1995.
- [INSCOM 1999] *SIMO Data Model*, Draft 0.7, Prepared by Synectics (John Nixon) for INSCOM, 14 May 1998, UNCLASSIFIED.
- [ISB 1995] *Modernized Integrated Data Base (MIDB) Data Structures and Selected Migration Systems*, Memorandum for Distribution, CMS 95-01270, S.J. Davidson, Chairman, Intelligence Systems Board (ISB) Migration Panel, 13 October 1995, UNCLASSIFIED.
- [JCAPS 1997a] *JCAPS Physical Data Model*, File jcappy7.er1 (23 Mbytes), LOGICON for CISA/Architectures Directorate, 1 April 1997, UNCLASSIFIED.
- [JCAPS 1997b] *JCAPS Logical Data Model*, File jcapsstd.er1 (32 Mbytes), LOGICON for OASD(C3) Information Integration and Interoperability Directorate, 31 December 1997, UNCLASSIFIED.

UNCLASSIFIED

- [JCAPS 1998a] *JCAPS Physical Data Model*, File jcappy7.er1, LOGICON for OASD(C3) Information Integration and Interoperability Directorate, 1 August 1998, UNCLASSIFIED.
- [JCAPS 1998b] *JCAPS Data Schema*, File schema801.er1, LOGICON for OASD(C3) Information Integration and Interoperability Directorate, 1 August 1998, UNCLASSIFIED.
- [JCAPS 1998c] *JCAPS Data Schema for the Beta Software Release*, File aug198a.er1, LOGICON for OASD(C3) Information Integration and Interoperability Directorate, 11 August 1998, UNCLASSIFIED.
- [JCAPS 1999a] *JCAPS Version 2 System User Guide*, LOGICON Corporation for OASD(C3I)-IA (JCAPS Program Manager), 30 June 1999, UNCLASSIFIED.
- [JCAPS 1999b] *JCAPS Prototype Version 2.0 Detailed IDEF1X Physical Data Model*, LOGICON Corporation for OASD(C3I)-IA (JCAPS Program Manager), 1 August 1999, UNCLASSIFIED.
- [JCAPS 1999c] *JCAPS Version 2 Integrated Data Dictionary*, OASD(C3I)-IA (JCAPS Program Manager), 30 July 1999, UNCLASSIFIED.
- [JCAPS 2000a] *JCAPS Prototype Version 2.1 Detailed IDEF1X Physical Data Model*, LOGICON Corporation for OASD(C3I)-IA (JCAPS Program Manager), April 2000, UNCLASSIFIED.
- [JCAPS 2000b] Informal Communication Requesting Comments on Proposal for CADM Conformance, OASD(C3I)-IA (JCAPS Program Manager), 16 May 2000, UNCLASSIFIED.
- [JDBE 1995] *Joint Data Base Elements for Modeling and Simulation (JDBE) Methodology Manual*, Draft DoD 5000.bb-M, DUSD (Acquisition and Technology), February 1995, UNCLASSIFIED.
- [Joint Pub 1-02 1994] *Department of Defense Dictionary of Military and Associated Terms (Includes US Acronyms and Abbreviations and NATO Terms (English Only))*, Joint Publication Number 1-02, Joint Chiefs of Staff, 23 March 1994, UNCLASSIFIED.
- [Joint Pub 6.04 1993] *U.S. Message Text Formatting Program*, Joint Pub 6-04, DISA/JIEO, 1 October 1993, UNCLASSIFIED.
- [JTA 1997a] *Department of Defense Joint Technical Architecture*, Version 1.0, 22 August 1996, UNCLASSIFIED (Draft Version 2.0 of 18 July 1997 is available for comment through <http://www-jta.itsi.disa.mil/>).
- [JTA 1997b] *DoD Implementation Guidance for the Joint Technical Architecture*, DUSD (Acquisition and Technology) and ASD(C3I), Memorandum to Joint Chiefs of Staff, Office of the Secretary of Defense, and Military Departments and Agencies, 22 August 1996, UNCLASSIFIED.
- [MCEB 1998] *MCEB-Directed Follow-Up Information to Services and Agencies on NETWARS*, Attachment B, *Information Exchange Requirements (IERs) Attributes for Communications Modeling and Simulation*, The Joint Staff [COL(P) Marilyn A. Quagliotti, Acting Director for C4 Systems], 16 June 1998, UNCLASSIFIED.
- [NAD 1997] *Naval Architecture Database*, NRAD, August 1997, UNCLASSIFIED.

UNCLASSIFIED

- [NAD 1998a] *Naval Architecture Database*, CD ROM Version 1.1, Silver Bullet Solutions, Incorporated, for SPAWAR Architecture Division (051-1), 27 January 1998, UNCLASSIFIED.
- [NAD 1998] *Naval Architecture Database (NAD) Data Model Version 2.0—Analysis for CADM Draft 2.0*, Institute for Defense Analyses, 7 July 1998, UNCLASSIFIED.
- [NETWARS 1998a] *NETWARS Modeling and Simulation Interoperability Standards*, Version 1.0, NETWARS Project Standards Working Group, 27 March 1998, UNCLASSIFIED.
- [NETWARS 1998b] *NETWARS EMA and Parser APIs and OPNET Models Library*, Prepared by SRI International for The Joint Chiefs of Staff J6 Directorate (LTC Patrick Vye), July 1998, UNCLASSIFIED.
- [NETWARS 1998c] *NETWARS Toolkit Version 1.1 Functional Requirements*, Prepared by SRI International for The Joint Chiefs of Staff J6 Directorate (LTC Patrick Vye), 9 July 1998, UNCLASSIFIED.
- [NETWARS 1998d] *Simulation Description File Specification*, Prepared by SRI International for The Joint Chiefs of Staff J6 Directorate (LTC Patrick Vye), September 1998, UNCLASSIFIED.
- [NIPD 1993] *NATO Interoperability Planning Document*, Allied Data Systems Interoperability Agency, 1 January 1993, NATO UNCLASSIFIED:
- Volume I, *Organization of NATO Information Systems Interoperability*
 - Volume II, *Formal Specification of Information Exchange Requirements*
 - Volume III, *Plan for the Development of NATO Common Interoperability Standards*
 - Volume IV, *Plan for the Configuration Management of NATO Common Interoperability Standards*
 - Volume V, *Testing Concept for NATO Common Interoperability Standards*
 - Volume VI, *Documentation Plan for NATO Common Interoperability Standards*.
- [NSSA 2000] Informal Communication on CADM Conformance, Matt Lasley, National Security Space Architect, 219 May 2000, UNCLASSIFIED.
- [PS-ARCADM 2000a] *Physical Schema for the Army Core Architecture Data Model (ARCADM)*, Draft, Institute for Defense Analyses for U.S. Army ODISC4, 23 August 2000 [PS_ARCADM20_23Aug00.zip], UNCLASSIFIED.
- [PS-ARCADM 2000b] *Physical Schema for the Army Core Architecture Data Model (ARCADM)*, Draft, Institute for Defense Analyses for U.S. Army ODISC4, 29 September 2000 [PS_ARCADM20_29Sep00.zip], UNCLASSIFIED.
- [PS-ARCADM 2000c] *Physical Schema for the Army Core Architecture Data Model (ARCADM)*, Institute for Defense Analyses for U.S. Army ODISC4, Baseline 2.0, 26 October 2000 [PS_ARCADM20_26Oct00.zip], UNCLASSIFIED.
- [Pub 1.03 1987] *DoD Dictionary of Military and Associated Terms (Incorporating the NATO and IADB Dictionaries)*, Joint Publication Number 1.03, Joint Chiefs of Staff, 1987 (with subsequent change pages), UNCLASSIFIED.
- [Pub 6.04-44 1992] *U.S. Message Text Formatting Program*, Joint Pub 6-04.44, DISA/JIEO, 1 October 1992, UNCLASSIFIED.

UNCLASSIFIED

- [Rausch 1998] *Data Dictionary Information from a User's Perspective for the JCAPS Beta Software Release*, Informal Communication from Arnie Rausch, OASD(C3) Information Integration and Interoperability Directorate, 2 October 1998, UNCLASSIFIED.
- [Rumbaugh 1991] Rumbaugh, James, et al., *Object-Oriented Modeling and Design*, Prentice-Hall, Englewood Cliffs, New Jersey, 1991.
- [SAASE 1997] *Data Model Diagram for SAASE*, Provided by LOGICON for CISA, August 1997, UNCLASSIFIED.
- [SBSI 2000a] Informal Communication on CADM Conformance, Silver Bullet Solutions, Incorporated (Mr. Dave McDaniels), August 2000, UNCLASSIFIED.
- [SBSI 2000b] Information Communication to JCAPS Program Manager on the DIAD, Silver Bullet (Mr. Dave McDaniels), 12 October 2000, UNCLASSIFIED.
- [SIMO 1998a] *System Information Management Office (SIMO) Data Model and Data Element Comparison*, Draft, Army SIMO, 11 March 1998, UNCLASSIFIED.
- [SPAWAR 1997a] *Naval C4ISR Architecture Primer*, Deputy Chief Engineer for Architecture and Standards and the Naval Architecture Working Group (NAWG), SPAWAR Operational and Systems Architecture Division (SPAWAR 051-2), Department of the Navy, 17 January 1997, UNCLASSIFIED.
- [SPAWAR 1997b] *Navy C4ISR Architecture Repository Version 0.4*, SPAWAR Operational and Systems Architecture Division (SPAWAR 051-2), Department of the Navy, 2 May 1997, UNCLASSIFIED.
- [UML v1.1 1997] *Unified Modeling Language Version 1.1*, Rational Software Corporation, et al., 1 September 1997, UNCLASSIFIED:
 - *Summary*
 - *Semantics and Appendices*
 - *Notation Guide*.
- [USIGS 1997a] *U.S. Imagery and Geospatial System (USIGS) Architecture Framework*, NIMA, July 1997, UNCLASSIFIED.
- [USIGS 1998a] *U.S. Imagery and Geospatial Information System Conceptual Data Model - A (USIGS-CDM-A) Effectivity 1.5*, D. Appleton Company for NIMA (Dr. Jacob A. Teller), 23 June 1998, UNCLASSIFIED.
- [USSOCOM 2000] Informal Communication on CADM Conformance, Ms. Renee Puzio for U.S. Special Operations Command, 18 May 2000, UNCLASSIFIED.
- [USSTRATCOM 2000] Informal Communication on CADM Conformance, Mr. Walter R. Johnson, Mr. John D. Henne, and Mr. Bobby Fisher for U.S. Strategic Command, 18 May 2000, UNCLASSIFIED.
- [USTRANSCOM 2000] Informal Communication on CADM Conformance, Mr. Brent Bingham, Mr. Mike Glass, Maj. Michael Marek, and Mr. Mike Gilchrist for U.S. Strategic Command, 2 June 2000, UNCLASSIFIED.
- [Webster 1986] *Webster's Ninth New Collegiate Dictionary*, Merriam-Webster, Incorporated, 1986.
- [Webster's II 1994] *Webster's II New Riverside University Dictionary*, The Riverside Publishing Company, 1994.

UNCLASSIFIED

- [XML 1997] *XML: Principles, Tools, and Techniques*, World Wide Web Journal, Volume 2, Issue 4 (Fall 1997), O'Reilly and Associates, Sebastopol, California, 1997.
- [Yourdon 1989] Yourdon, Edward, *Modern Structured Analysis*, ISBN 0-13-598624-9, Prentice-Hall, Englewood Cliffs, New Jersey, 1989.
- [Zachman 1987] Zachman, John A., "A Framework for Information Systems Architecture," *IBM Systems Journal*, Volume 26, Number 3, 1987.

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ANNEX O. GLOSSARY

3D	Three Dimensional	AMPS	Automated Message Processing System
A	Approved (DDDS Status)	AO	As Occurring
A&T	Acquisition and Technology	AOA	Army Operational Architecture
AAP	NATO Standardization Agreements and Allied Publications	AOC	Air Operations Center
AARMS	Army Architecture Repository Management System	API	Application Program Interface
AATS	Automated Architecture Tool Suite	AR	Architecture; Army; Area (JCAPS)
ABCS	Army Battle Command System (formerly ATCCS)	ARCADM	Army Core Architecture Data Model
ACC	Architecture Coordination Council	ARCH	Architecture
ACL	Access Control List	ARFOR	Army Force
ACTVTY	Activity	ARSOF	Army Special Operations Forces
ACTY	Activity (JCAPS)	AS	Assessment Node
ADP	Automatic Data Processing	ASA	Army Systems Architecture
ADPM	Architecture Development Process Model (DON-CIO; Framework 2.1)	ASA-C	Army Systems Architecture Conceptual (U.S. Army SIGCEN)
AF	Air Force	ASA-D	Army Systems Architecture Detailed (PEO-C3S)
AFATDS	Advanced Field Artillery Tactical Data System	ASADM	Army Systems Architecture Data Model
AFCA	Air Force Communications Agency	ASAPS	Army Systems Architecture Physical Schema
AFEDM	Air Force Enterprise Data Model	ASAFD	Army Systems Architecture Framework Document
AFFOR	Air Force Force	ASN	Association (JCAPS)
AFSOF	Air Force Special Operations Forces	ASCII	American National Standard Code for Information Interchange
AFV2	C4ISR Architecture Framework Version 2.0 (JCAPS)	ASD	Assistant Secretary of Defense
AGR	Agreement	ASP	Active Server Pages (Microsoft)
AI	Artificial Intelligence	ASSN	Association
AICDM	Army Integrated Core Data Model (based on C2CDM)	ASSOC	Association
AIS	Automated Information System	ATA	Army Tactical Task
AK	Alternate Key (IDEFIX)	ATC	Air Traffic Control
AMC	Air Mobility Command	ATCCIS	Army Tactical Command and Control Information System (SHAPE Study)
		ATTR	Attribute
		AUTODIN	Automatic Digital Network

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AV	All View	CADM	Core C4ISR Architecture Data Model
AWG	Architecture Working Group (CISA/Joint Staff)	CAP	Capability
		CAPAB	Capability
BAH	Booz-Allen and Hamilton, Incorporated	CASE	Computer-Aided Software Engineering
BAS	Battlefield Automated System	CAV	Caveated
BDA	Battle Damage Assessment	CCIA	Communications and Computers Information Architecture
BLT	Battalion	CCS	Command and Control Systems
BM	Battle Management (Node)	CCSD	Command Communications Service Designator
BMDO	Ballistic Missile Defense Organization	CD	Code; Combat Direction Node
BOM	Bit-Oriented Message	CDAd	Component Data Administrator
C	Candidate (DDDS Status); Continuous	CDC	Combat Direction Center
C2	Command and Control	CDR	Commander
C2CDM	Command and Control Core Data Model	CE	Communications-Electronics
C2E	Command and Control Element	CECOM	U.S. Army Communications-Electronics Command
C2IE	Command and Control Information Exchange (Element)	CEOI	Communications-Electronics Operating Instruction
C2W	Command and Control Warfare	CFCSE	DISA/JIEO Center for Computer Systems Engineering (formerly Center for Software)
C3	Command, Control, and Communications (US); Consultation, Command, and Control (NATO)	CFS	DISA/JIEO Center for Standards
		CI	Counterintelligence; Component Integration (Laboratories)
C3I	Command, Control, Communications, and Intelligence	CIAD	Command Intelligence Architecture/Planning Document
C3S	Command, Control, and Computer Systems	CIAP	Command Intelligence Architecture/Planning Program
C4	Command, Control, Communications, and Computers	CIC	Combined Intelligence Center; Combat Information Center (U.S. Navy)
C4I	Command, Control, Communications, Computers, and Intelligence	CIID	Command Intelligence Implementation Document
C4ISP	Command, Control, Communications, Computers, and Intelligence Support Plan	CIK	Cryptographic Ignition Key
		CINC	Commander in Chief
C4ISR	Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance	CIO	Chief Information Officer
		CIR	Circuit
		CISA	C4I Integration Support Activity (OSD); CINC Information Superiority Architectures (Program)
C4RDP	Command, Control, Communications, and Computers Requirements Definition Program (U.S. Army)	CJCS	Chairman, Joint Chiefs of Staff
		CJCSI	Chairman, Joint Chiefs of Staff Instruction

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CJCSM	Chairman, Joint Chiefs of Staff Manual	DAT	Data
CKT	Circuit	DB	Database
CL	Collection Node	DBMS	Database Management System
CLASS	Classification	DCS	Defense Communications System
CLS	Class; Classification (JCAPS)	DDA	DoD Data Architecture (formerly DoD Data Model or DDA)
CLSN	Classification (JCAPS)	DDCI	Deputy Director for Central Intelligence
CM	Communications Node	DDDS	Defense Data Dictionary System
CMA	C4ISR Mission Assessment	DDM	DoD Data Model (formerly EDM, now DDA)
CMD	Command	DDN	Defense Data Network
CMPRT	Compartment	DDRS	Data Dictionary Repository System (now Defense Data Dictionary System)
CN	Communications Node	DFD	Data Flow Diagram
COAX	Coaxial Cable	DE	Data Element
COE	Common Operating Environment; U.S. Army Corps of Engineers	DEF	Definition; Defined
COM	Communications	DEPT	Department
COMM	Communications	DESCR	Description
COMINT	Communications Intelligence	DIA	Defense Intelligence Agency
COMP	Compliance (JCAPS)	DIAD	DON Integrated Architecture Database
COMSEC	Communications Security	DICT	Dictionary
CONFID	Confidentiality	DII	Defense Information Infrastructure
CONS	Consumer	DISA	Defense Information Systems Agency
CONTD	Continued	DISC4	Office of the Director of Information Systems for Command, Control, Communications and Computers (Department of the Army)
COTS	Commercial Off-the-Shelf	DIV	Division
CP	Command Post	DM	Data Model
CPCELL	Command Post Cell	DM&AT	Data Model and Analysis Panel (Architecture Working Group)
CRC	Command Relationships Chart	DMA	Defense Mapping Agency (now NIMA)
CRCT	Circuit (JCAPS)	DMIR	Data Management and Interoperability Repository (DON-CIO)
CRD	Capstone Requirements Document	DMS	Defense Messaging System
CRIMS-WARR	Communications Requirements Information Management System—Warrior Reachback	DMSO	Defense Modeling and Simulation Office
CS	Communications System	DOC	Document; Department of Commerce
C/S/A	Command/Service/Agency		
CTF	Combined Task Force		
CTRL	Control		
D	Developmental (DDDS Status)		
DAd	Data Administrator		
DAD	DoD Data Administrator		
DART	Data Analysis & Reconciliation Tool		
DASD	Deputy Assistant Secretary of Defense		

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DoD	Department of Defense	FEBA	Forward Edge of the Battle Area
DOE	Department of Energy	FEMA	Federal Emergency Management Agency
DODIIS	DoD Intelligence Information Systems	FFIRN	Fixed Field Indicator Reference Number (USMTF)
DOM	Document Object Model (XML)	FIA	Functional C3 Interoperability Architecture
DON	Department of the Navy	FIPS	Federal Information Processing Standard
DSSCS	Defense Special Security Communications System	FK	Foreign Key (IDEF1X)
DSWG	Data Standardization Working Group (JCAPS)	FM	Frequency Modulated
DTD	Document Type Definition	FORGN	Foreign
DUSD	Deputy Under Secretary of Defense	FORMETS	NATO Message Text Formatting System
DWCF	Defense Working Capital Fund	FOUO	For Official Use Only
ECH	Echelon	FPI	Functional Process Improvement
EDM	(DoD) Enterprise Data Model (now DDA)	FRAGO	Fragmentation Order
EEI	Essential Elements of Information	FRD	Formerly Restricted Data
EL	Element	FS	Fire Support
ELEM	Element	FTP	File Transfer Protocol
ELEV	Elevation	FTS	Federal Telecommunications System
ELINT	Electronic Intelligence	FUDN	Field Use Designator Number (USMTF)
EMAIL	Electronic Mail	FUNC	Function; Functional
ENUM	Enumeration	FUNCL	Functional
ENUMS	Enumerations	FUNCT	Function; Functional
EQUIP	Equipment	FY	Fiscal Year
ER	Entity-Relationship		
ERA	Entity-Relationship-Attribute		
ES	End System	GIF	Graphics Interchange Format
ESS	Essential	GCE	Ground Combat Element
EX	Execution (Weapon System) Node	GCCS	Global Command and Control System
EXCH	Exchange	GH3	Generic Hub 3 Data Model (ATCCIS)
EXCN	Exchange (JCAPS)	GH4	Generic Hub 4 Data Model (ATCCIS); see LC2IEDM
F	Function (JCAPS)	GHz	Gigahertz
FAA	Federal Aviation Administration	GIG	Global Information Grid
FAX	Facsimile	GNIE	Global Networked Information Enterprise
FCB	(JCAPS) Functional Control Board	GOTS	Government Off-the-Shelf
FDAd	Functional Data Administrator	GRP	Group (JCAPS)
FDC	Fire Direction Center	GPRA	Government Performance and Results Act of 1993
FDEO	Fort Detrick Engineering Office (USAISEC)		
FDI	Field Distribution Indicator		

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GSORTS	GCCS Status of Resources and Training System	IE	Inversion Entry (IDEFIX); Integrated Engineering; Information Element
GUI	Graphical User Interface	IE5	Internet Explorer 5.0
GUID	Guidance	IEEE	The Institute of Electrical and Electronics Engineers, Inc.
H	High	IEM	Information Exchange Matrix
HDD	Hierarchical Data Dictionary (Navy Architecture Database)	IER	Information Exchange Requirement
HOCG	High-Level Operational Concept Graphic	IF	Interface (JCAPS)
HQ	Headquarters	IID	Information Integration and Interoperability Directorate [OASD(C3I)]
HRD	Hierarchical Requirements Dictionary	IMINT	Imagery Intelligence
HTML	Hypertext Markup Language	INDEP	Independent
HTTP	Hypertext Transfer Protocol	INF	Information
HUMINT	Human Intelligence	INFO	Information
HW	Hardware	INSCOM	U.S. Army Intelligence and Security Command
Hz	Hertz	INTEROP	Interoperability
I3A	Installation Information Infrastructure Architecture	INTF	Interface (JCAPS)
IA	Information Assurance; Integration and Architecture	IOC	Initial Operational Capability
IC	Intelligence Community	IP	Internet Protocol
ICAM	Integrated Computer-Aided Manufacturing	IPT	Integrated Product Team
ICARIS	Integrated C4I Architectures Requirements Information System (formerly, Intelligence Communications and Architectures Requirements Information System) (CISA)	IS	Intermediate System
ICOM	Input, Control, Output, and Mechanism (IDEF0)	ISEC	U.S. Army Information Systems Engineering Command
ID	Identifier	ISO	International Organization for Standardization
IDA	Institute for Defense Analyses	IT	Information Technology; Item (JCAPS)
IDB	Integrated Database	ITA	Information Technical Architecture
IDD	Integrated Data Dictionary (JCAPS)	ITF	Integration Task Force
IDEF	Integration Definition (formerly ICAM Definition) (language, methodology)	ITM	Information Technology Management; Item
IDEF0	IDEF for Activity (Process) Modeling	JAOC	Joint Air Operations Center
IDEFIX	IDEF for Data Modeling	JBC	Joint Battle Center
		JCAPS	Joint C4ISR Architecture Planning/Analysis System
		JCDB	Joint Common Database
		JCS	Joint Chiefs of Staff
		JDBE	Joint Database Elements
		JFLCC	Joint Force Land Component Commander

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JIC	Joint Intelligence Center	M	Medium; Moderate
JICPAC	Joint Intelligence Center, Pacific Command	M&S	Modeling and Simulation
JIEO	Joint Interoperability and Engineering Organization	MAN	Metropolitan Area Network; Management
JIERS	Joint Information Exchange Requirements System	MARFOR	Marine Force
JINTACCS	Joint Interoperability of Tactical Command and Control Systems (U.S. DoD joint message standards)	MASINT	Measurement and Scientific Intelligence
JMET	Joint Missions Essential Task	MAT	Materiel
JMETL	Joint Mission Essential Task List	MATI	Materiel Item
JOC	Joint Operations Center	MB	Megabytes (millions of bytes)
JOPEs	Joint Operations Planning and Execution System	Mbps	Millions of bits per second
JSOTF	Joint Special Operations Task Force	MCEB	Military Communications and Electronics Board
JTA	Joint Technical Architecture	MDL	Model (JCAPS)
JTF	Joint Task Force	MEAS	Measured
JTIDS	Joint Tactical Information Distribution System	MED	Medium
		MEF	Marine Expeditionary Force
		METH	Method
		METL	Mission Essential Task List
		MEU	Marine Expeditionary Unit
		MGRS	Military Grid Reference System
		MHz	Megahertz
KB	Kilobytes	MIDB	Modernized Integrated Data Base
Kbps	Thousands of bits per second	MIDS	Multifunctional Information Distribution System (NATO)
KHz	Kilohertz		
KQML	A new generation markup language	MIIDS	Military Intelligence Integrated Data System (US)
		MIT	Mean Inter-arrival Time
L	Low	MNS	Mission Need Statement
LAN	Local Area Network	MOA	Memorandum of Agreement
LC2IEDM	Land Command and Control Information Exchange Data Model (ADatP-32)	MOE	Measure of Effectiveness
		MOP	Memorandum of Policy
LDM	Logical Data Model	MOS	Military Occupational Specialty
LIN	Line Item Number	MRT	Model Reference Technology (Air Force's Framework)
LISI	Levels of Information System Interoperability	MSC	Military Sea-Lift Command; Major Subordinate Command (NATO)
LN	Line (JCAPS)		
LNK	Link	MS	Mission (JCAPS)
LOC	Location	MSG	Message
LST	List	MSN	Mission
LSTEL	List Element	MTBF	Mean Time Between Failures
LVL	Level	MTF	Message Text Format
		MTMC	Military Transportation Mobility Command
		MTRX	Matrix

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MTTR	Mean Time to Repair		Communications and Computers (C4)
N/A	Not Applicable	OE	Operational Element
NAD	Naval Architecture Database	ONCD	Operational Node Connectivity Diagram
NASA	National Aeronautics and Space Administration	OP	Operational
NATO	North Atlantic Treaty Organization	OPER	Operational
NAV	Navigation	OPFAC	Operational Facility
NAVFOR	Navy Force	OPNET	A tool for communications simulation modeling
NAVSO	Naval Special Operations Forces	OPS	Operations; Operational
NBC	Nuclear, Biological, and Chemical	OPSIT	Operational Situation
NCA	National Command Authorities	ORCON	Originator Controlled
ND	Need (JCAPS)	ORD	Operational Requirements Document
NETWARS	Network Simulation Warfare (A jointly developed tool for modeling and simulation)	ORG	Organization
NGO	Non-Government Organization	OSD	Office of the Secretary of Defense
NIMA	National Imagery and Mapping Agency	OUSD	Office of the Under Secretary of Defense
NIPD	NATO Interoperability Planning Document	OV	Operational View
NIST	U.S. National Institute of Standards and Technology	OWN	Ownership
NITF	National Imagery Transmission Format	P	Periodic
NMETL	Navy Mission Essential Task List	PACAF	Pacific Command Air Force Component
NO	Number	PARA	Paragraph
NRAD	Naval Research and Development Command	PCAT	Personal Computer Automated Tool (DISA/JIEO/CFSW)
NRT	Near-Real Time	PDF	Probability Density Function
NSA	National Security Agency	PDM	Physical Data Model
NSSA	National Security Space Architect	PEO	Program Executive Officer
NTA	Naval Tactical Task	PERISH	Perishability (NETWARS)
NTTL	Naval Tactical Task List	PHIGS	Programmer's Hierarchical International Graphics System
NTWK	Network	PIN	Personal Identification Number
NWS	National Weather Service	PK	Primary Key (IDEF1X)
NWTDB	Naval Warfare Tactical Database	PKG	Package
OA	Operational Architecture	PME	Prime Mission Element
OASD	Office of the Assistant Secretary of Defense	POC	Point of Contact
ODISC4	Office of the Director of Information Systems for Command, Control,	POL	Petroleum, Oil, Lubricants
		POS	Position
		PR	Processing (Processor) Node
		PRCS	Process (JCAPS)
		PREC	Precision (NETWARS)
		PROC	Process
		PROD	Producer

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PROP	Property	SECDEF	Secretary of Defense
PROPIN	Proprietary Information	SGML	Standard Generalized Markup Language
PS	Physical Schema; Processing System	SGV	Scalable Vector Graphics
PT	Point	SHAPE	Supreme Headquarters Allied Powers Europe
PVA	Policy, Velocity, and Acceleration	SIGCEN	U.S. Army Signal Center
PVO	Private Volunteer Organization	SIGCEN/SA	U.S. Army Signal Center System Architecture Branch
Q	Quarter	SIGINT	Signals Intelligence
QEI	Quantifiable Element(s) of Information	SITREP	Situation Report
QoS	Quality of Service	SME	Subject Matter Expert
R	Not Approved (DDDS Status)	SOC	Special Operations Command
RCVR	Receiver	SOF	Special Operations Forces
RD	Restricted Data	SPAWAR	U.S. Navy Space and Naval Warfare Systems Command
RECT	Rectangle	SPECAT	Special Category
REF	Reference	SQL	Database Language SQL
REL	Releasable; Relationship	SRD	Systems Requirement Document
REQ	Requirement	SSL	Secure Sockets Layer
REQMA	Requirements Mission Area	ST	Strategic (UJTL)
REQMT	Requirement (JCAPS)	STA	Status
RGB	Red, Green, Blue	STAT	Status (JCAPS)
ROK	Republic of Korea	STD	Standard
RSA	Name for public key encryption scheme	STND	Standard
RT	Real Time	SV	Systems View
Rx	Reception	SVC	Service
S	Slow	SW	Software; Switch
SA	System Architecture (View)	SWI	Software Item
SAASE	Standard Data Element-Based Automated Architecture Support Environment (CISA; formerly DISA)	SY	System (JCAPS)
SAIC	Science Applications International Corporation	SYS	System
SBA	Simulation-Based Acquisition	TA	Technical Architecture (View); Tactical (UJTL)
SCI	Sensitive Compartmented Information	TAC	Tactical
SVG	Scalable Vector Graphics	TADIL	Tactical Data Information Link (JINTACCS)
SCTY	Security	TAFIM	Technical Architecture Framework for Information Management
SE	Systems Element	TAM	Target Architecture Model (IA)
SEAD	Suppression of Enemy Air Defenses	TASIT	Tactical Analog Interswitch Trunk
		TBD	To Be Determined
		TBMD	Theater Ballistic Missile Defense

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TCP	Transmission Control Procedure (Internet)	USCENTCOM	United States Central Command
TDIST	Tactical Digital Interswitch Trunk	USCINACOM	Commander-in-Chief, United States Atlantic Command
TDM	Time Division Multiplexing	USCINCCENT	Commander-in-Chief, United States Central Command
TEL	Telephone	USCINCEUR	Commander-in-Chief, United States European Command
TEMP	Temporary	USCINCPAC	Commander-in-Chief, United States Pacific Command
TERM	Terminal	USCINCSO	Commander-in-Chief, United States Southern Command
THRD	Thread	USCINCSOC	Commander-in-Chief, United States Special Operations Command
TIDS	Tactical Imagery Dissemination System	USD(A&T)	Under Secretary of Defense for Acquisition and Technology [now USD(AT&L)]
TMIST	Tactical Message Interswitch Trunk	USD(AT&L)	Under Secretary of Defense for Acquisition, Technology, and Logistics
TPIO	TRADOC Program Integration Office	USIGS	United States Imagery and Geospatial System
TOE	Table of Organization and Equipment	USMC	United States Marine Corps
TRADOC	U.S. Army Training and Doctrine Command	USMTF	U.S. Message Text Format (JINTACCS)
TRANSM	Transmission	USPACOM	United States Pacific Command
TRM	Technical Reference Model	USSOCOM	United States Special Operations Command
TROPO	Tropospheric Scatter Radio	USSOUTHCOM	United States Southern Command
TS/SCI	Top Secret/Sensitive Compartmented Information	USSPACECOM	United States Space Command
TSK	Task	USTRANSCOM	United States Transportation Command
TTCP	Tailored Technical Criteria Profile	UTC	Unit Type Code
TV	Technical View	UTM	Universal Transverse Mercator
TX	Transmission; Text	VER	Version
TXT	Text (JCAPS)	VMF	Variable Message Format
TY	Type	VML	Vector Markup Language
UAF	USIGS Architecture Framework	VOX	Voice
UAV	Unmanned Aerial Vehicle	VRML	Virtual Reality Modeling Language
UIC	Unit Identification Code (GSORTS)	VS	Very Slow
UJTL	Universal Joint Task List	VSL	Visual (JCAPS)
UML	Unified Modeling Language	VTC	Video Teleconference
UR	Unit Relationship (JCAPS)		
URL	Uniform Resource Locator		
US	United States		
USACOM	United States Atlantic Command		
USAISEC	U.S. Army Information Systems Engineering Command		
USAF	United States Air Force		
USCENTAF	United States Central Command Air Force Component		

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W3C	World Wide Web Consortium
WAN	Wide Area Network
WG	Working Group
WGS	World Geodetic System
WIN	WWMCCS Information Network
WS	Workstation (JCAPS)
WWMCCS	Worldwide Military Command and Control System
WMSC	Weather Message System Center
X	Archived (DDDS Status)
XM	Transmission (JCAPS)
XMT	Transmit
XML	Extensible Markup Language
XSL	XML Style Sheet
XV	Extra View
Y2K	Year 2000

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13. ABSTRACT (Maximum 200 words) Based on data requirements from the DoD <i>C4ISR Architecture Framework Version 2.0</i> and from numerous architecture initiatives of the Military Commands, Services, and Agencies derived from the Framework, the C4ISR Core Architecture Data Model (CADM) provides a specification of architecture data expected to be common among two or more DoD architecture developers. The CADM fully supports all the architecture products specified in Framework 2, including all of Appendix A of the Framework. The CADM supports additional architecture data requirements arising from Command, Service, and Agency architecture databases and data models. Part of the CADM has been extended to form the basis of a new Army Systems Architecture Database. The Joint C4ISR Architecture Planning/Analysis System (JCAPS) has been under development for 3 years and uses part of the CADM in its database design. The specific objective addressed by this IDA report is to determine what changes are required of JCAPS to assure full CADM 2.0 compliance. The report identifies features of the JCAPS 2.1 data model that are seen as barriers for achieving CADM conformance and proposes a new data model to be used for future JCAPS implementations. This new model is electronically embedded in the CADM data model as a view with 107 CADM entities, with additions provided by Army (14 entities) and Navy extensions (1 entity) to the CADM, as well as by JCAPS itself (21 entities and 90 additional attributes for CADM entities). The resulting data model has 143 entities and supports 100 percent of JCAPS 2.1 data requirements. The document provides annexes with data model diagrams describing JCAPS 2.1, the recommended data model, the traceability tables that map JCAPS 2.1 to the recommended data model, and summaries of work completed by the JCAPS Data Standardization Working Group in 1999 that made partial recommendations for CADM conformance.			
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